

Designing a Service Concept for Personal Learning in Working Life

Rauhala, Mervi

2015 Leppävaara

Laurea University of Applied Sciences
Leppävaara

Designing a Service Concept for Personal Learning in Working Life

Mervi Rauhala
Degree Programme in Service Inno-
vation and Design
Master's Thesis
April, 2015

Mervi Rauhala

Designing a Service Concept for Personal Learning in Working Life

Year

2015

Pages

73

Due to the rapidly changing environment, especially people working in knowledge intensive professions need more effective ways for learning continuously. At the same time technology enables us to build learning networks and form connections from which we can derive knowledge. Based on the principles of the learning theory called connectivism, this thesis aims to create a service concept which helps knowledge workers to grow and strengthen their personal learning network and thus enable their informal personal learning in the context of their working life. The service concept was designed for a case company Markkinointi-instituutti as a development project.

Customers play an active role in learning and training services since the learning process is by nature interactive and collaborative. In order to create learning service offerings which have real impact in customers' working life, it is vital to understand value creation. The theoretical part of this thesis discusses the paradigm shift in value creation from the industrial era value-in-exchange and goods-dominant logic to service and customer-oriented approaches of service and customer-dominant logic. According to these new views, value is created in customer processes and is customer driven. This shift in value creation has profound implications on service innovation which are discussed in this thesis. The new value creation and innovation paradigms are fundamental for the designed service concept since it is based on value co-creation and creating resource constellations for and with the customer.

Service design and the Lean startup approach are presented as frameworks and methodologies for designing successful service concepts. Both have been used in the empirical part of the thesis. Service design was a logical choice because it focuses on understanding both the customers and the context, which are both fundamental for the value creation logic of the service concept in question. The Lean startup approach, on the other hand provides practical tools especially for validating the business model for the service concept.

The design process followed loosely the double diamond design process but the process also had elements from the Lean startup approach. Customer insights were gathered with qualitative research using contextual interviews. The findings were formed into two personas. Service blueprint was used as a tool for identifying new opportunities for value creation. The service concept was developed with the help of a strategy profile and concretized with a service ad. The business model was built and validated with the help of Lean Canvas and by piloting the actual service. The pilot was a platform to co-design the service with customers and stakeholders. The pilot group consisted of case company personnel and external customers. The results of the pilot are presented in this thesis in the form of a customer experience journey.

Keywords: lean startup; personal learning network; service concept; service design; value creation

Mervi Rauhala

Palvelukonseptin suunnittelu henkilökohtaiseen oppimiseen työelämässä

Vuosi 2015 Sivumäärä 73

Työelämän nopeiden muutoksen vuoksi etenkin tietointensiivistä työtä tekevät tarvitsevat tehokkaampia tapoja oppia jatkuvasti uutta. Samaan aikaan tekniikka mahdollistaa henkilökohtaisten oppimisverkostojen rakentamisen ja yhteyksien luomisen, joiden avulla tietoon pääsee käsiksi. Tässä opinnäytetyössä on kehitetty palvelukonsepti, joka auttaa tietotyöläistä rakentamaan ja vahvistamaan henkilökohtaista oppimisverkostoaan. Tämä mahdollistaa paremmin jatkuvan ammatillisen kehittymisen. Oppimisteoreettisena viitekehyksenä toimii konnektivismi. Palvelukonsepti on suunniteltu kehitysprojektina Markkinointi-instituutille.

Asiakkaiden rooli oppimis- ja koulutuspalveluissa on aktiivinen, koska oppiminen prosessina on interaktiivista ja kollaboratiivista. Kun suunnitellaan oppimispalvelua, jonka halutaan vaikuttavan asiakkaan työntekemisen tapoihin, on välttämätöntä ymmärtää arvonmuodostumista. Lopputyön teoreettinen osa käsittelee arvonmuodostumisen paradigman muutosta. Teollisen ajan logiikasta, jossa arvo nähtiin vaihdon välineenä ja se sisältyi tuotteisiin ja tavaroihin, on siirrytty palvelu- ja asiakasorientoituneisiin liiketoimintalogiikoihin. Niiden näkökulmasta arvo muodostuu asiakkaan prosesseissa ja arvonmuodostajana on asiakas. Tässä opinnäytetyössä käsitellään, millaisia vaikutuksia arvonmuodostumisen näkökulman muutoksesta on palveluinnovaatioille.

Opinnäytetyössä esitellään palvelumuotoilu ja Lean startup viitekehyksinä ja menetelminä, joiden avulla menestyksekkäitä palvelukonsepteja on mahdollista kehittää. Molempia hyödynnetään työn empiirisessä osassa. Palvelumuotoilu on looginen valinta sillä se keskittyy ymmärtämään sekä asiakasta että hänen kontekstiaan. Molempien ymmärtäminen on keskeistä kehitetyn palvelukonseptin ytimessä olevan arvonmuodostusajattelun kannalta. Lean startup -lähestymistapa on puolestaan hyödyllinen erityisesti liiketoimintamallin validoimisessa.

Suunnitteluprosessi mukailee löyhästi double diamond -muotoiluprosessia, mutta siinä hyödynnetään myös elementtejä Lean startup -lähestymistavasta. Asiakasymmärrystä hankittiin kvalitatiivisin menetelmin kontekstuaalisia haastatteluja hyödyntäen. Tulokset tiivistettiin kahteen persoonaan. Service blueprint -työkalun avulla tunnistettiin uusia mahdollisuuksia arvonluonnissa. Palvelukonseptin kehittämisessä hyödynnettiin myös sinisen meren arvoprofiilia ja konseptia konkretisoitiin kuvitteellisella mainoksella. Liiketoimintamallia kehitettiin ja validoitiin Lean Canvas -työkalun avulla ja pilotoimalla palvelua. Pilotti toimi yhteiskehittämisen alustana, jossa palvelua kehitettiin yhdessä asiakkaiden ja sidosryhmien kanssa. Pilotti-ryhmä koostui asiakkaista ja case-yrityksen omasta henkilöstöstä. Pilotin tulokset tiivistettiin asiakaskokemuspoluksi.

Avainsanat: arvonmuodostuminen; henkilökohtainen oppimisverkosto; palvelukonsepti; palvelumuotoilu; lean startup

Table of contents

1	Introduction	7
1.1	Objective of the thesis	8
1.2	Structure of the thesis	10
1.3	Delimitations of the thesis	11
2	Personal learning in the digital age.....	12
2.1	Connectivism: learning theory for the digital age.....	12
2.2	From knowledge to skills	14
2.3	Personal learning environments	16
2.4	Personal learning Networks	16
2.5	Presenting the case company	17
3	Customer-centric value creation and innovation.....	18
3.1	Paradigm shift in value creation	18
3.1.1	What is value?.....	19
3.1.2	Value creation in Service-Dominant logic and Service logic.....	19
3.1.3	Value creation in Customer-dominant logic	22
3.1.4	Customer-centric value creation	23
3.2	Service logic and innovation	24
3.2.1	Defining (service) innovation.....	24
3.2.2	Customer role in service innovation	25
4	Creating innovative services with Service design and Lean Startup approach	26
4.1	Need for customer-centric innovation methods	27
4.2	Introducing service design	28
4.2.1	Principles of service design.....	29
4.2.2	Service design from value creation perspective of Service logic	29
4.3	Introducing Lean Startup approach	30
4.3.1	Principles of Lean startup	30
4.3.2	“Leave the building” to learn from customers.....	32
4.3.3	Engaging early adapters.....	33
4.3.4	Validated learning.....	34
4.3.5	Minimum viable product	35
4.3.6	Lean startup from value creation perspective of Service logic	35
4.4	Lean startup and service design as customer-centric innovation methodologies - where do they overlap and where do they differ?	36
4.4.1	Discussing Service design and Lean startup as innovation methods: views from practitioners.....	36
4.4.2	Expert interview.....	39

	4.4.3 Lean startup and design thinking.....	40
5	Design process for the personal learning concept.....	41
5.1	The overall design process and methods.....	42
5.2	Discovery: finding the customer problem and setting the initial hypotheses .	44
5.2.1	Starting from the learner	44
5.2.2	Mock up Service ad.....	44
5.2.3	Service blueprint for getting new ideas and identifying value creation opportunities.....	45
5.2.4	Research through contextual interviews	47
5.2.5	Key findings from the first interviews	50
5.3	Define: validating the customer problem and defining the solution.....	51
5.3.1	Lean Canvas	51
5.3.2	Blue Ocean strategy profile	53
5.4	Second set of Interviews	54
5.4.1	Affinity diagramming	55
5.4.2	Creating Personas	56
5.5	Develop: Ideating the Service concept.....	57
5.5.1	Brainstorming the pilot service	57
5.5.2	Recruiting the pilot group	58
5.6	Deliver: Piloting the service and summarizing the learnings.....	59
5.6.1	Co-designing the service through the pilot	59
5.6.2	Gathering insights during the pilot and summarizing the learnings with customer experience journey	60
5.6.3	Service concept.....	61
6	Conclusions.....	62
	References	65
	Figures	69
	Tables	70
	Appendixes	71

1 Introduction

“Our only security is our ability to change.” -John Lilly

The world is changing really fast now days and the ways of working and learning are transforming. Especially among knowledge workers new skills are needed and on the other hand some may become obsolete almost overnight. As the futurist Alvin Toffler has said: “The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

But how do people learn in working life? According to the Institute for Research on Learning, formal training only accounts for 20 percent of how people learn their jobs. Most people learn their jobs by observing, asking questions, through trial and error or other unscheduled, largely independent activities (Attwell 2007, 2) thus learning is mostly informal. Human resources professionals in organizations often recognize the importance of informal learning. For example many are advocates of the so called 70-20-10 framework. The framework is said to be rooted on research carried out through the 1980s at the Center for Creative Leadership (CCL) in North Carolina. According to this framework only around 10 % of professional development is achieved by formal learning such as training programmes. The other 90 % is informal learning which occurs when we are doing our daily work. Approximately 20 % comes through colleagues and networks and as much as 70 % constitutes of just doing and developing your work. (70-20-10 Forum.)

Most workplaces today are equipped with some kind of tools that bring together people and content artefacts in learning activities to support them in constructing information and knowledge. These *learning environments* are important outcome of the learning process. They should be rather personalized than monolithic. (Wild et al. 2008, 1.) Personal learning environment (PLE) is comprised of all the tools we are using in our daily lives for learning (Attwell 2008, 4).

PLE can be seen to include a Personal learning network (PLN) which according to Cooke (2011, 9) consists of the learner and her contacts and colleagues with whom they surround themselves. From the perspective of Connectivism, a learning theory for understanding learning in the digital age, a PLE is the PLN. Ability to create and deepen contacts and connections is essential for learning and success. In fact making connections should be seen as learning activity. We derive our competence from forming connections and therefore the capacity to form connections between sources of information, and create useful information patterns, is required to learn in our knowledge economy. (Siemens 2004.) Connections can be built and fostered by making use of digital tools and networks. Still there are many knowledge workers

who don't use this enormous power of learning networks to their fullest potential. According to experience the usual reasons mentioned are lack of knowledge, skills and time.

How are educational institutions responding to these changes in environment? Do they share the views on informal learning and importance of learning networks? Traditionally informal learning has not been on the agenda of educational institutions and especially not on the agenda of companies providing training services for professional development. Maybe it should be!

According to futurist and consultant Ross Dawson, education is one of the industries that is going to be crunched (Dawson 2013). He sees that the focus of education is shifting dramatically from institutions to individuals. Students are able to access better resources online than in classrooms and peer recognition will become more valuable than certificates and degrees. Educational institutions should enable uniqueness of students through learning designed for the individual.

Against this backdrop a question arises how training companies and educational institutions could help especially people doing knowledge intensive work in creating their own personal learning environment which enables them to learn more effectively. Could the skills needed in building personal learning network be somehow promoted?

1.1 Objective of the thesis

This thesis is conducted as a development project for a case company, Markkinointi-instituutti. The aim is to create a new service concept which enables knowledge workers to foster their constant, personal learning and helps them to build their professional personal brand. This will also benefit their employers and the wider workplace community.

Service concept is defined here as in the Tekes *Vocabulary of Service Business* (2012): "a service concept is description of a service idea and the principle to be followed in the production of a service product. A service concept may be more or less detailed according to the purpose for which it is used. A service concept that serves as a basis for a business's activities should include a revenue model as well as an idea of the most central properties of the service, the value created by the service for a customer, and the resources needed to produce the service. One service concept may relate to several service products."

Next the background for the thesis is discussed and research questions are explained in detail.

As stated earlier there is clearly a need for continuous innovation for education industry due to the rapidly changing environment and evolving customer needs. Based on then current customer and trend insights innovation opportunities around informal learning and personal learning environments were explored. Could a service be designed which would help customers to build or tune their PLEs which would facilitate and accelerate their informal personal learning? PLEs and the framework for building a Personal learning environment for a knowledge worker are discussed in more detail in the following chapter, but in order to explain the research questions it's necessary to introduce the framework briefly.

PLE framework was built on the learning theory of connectivism and on the concept of personal learning environment. In Figure 1 framework containing six dimensions is illustrated. 1) Using open & closed learning resources to full potential, 2) Organizing work, tasks, note-taking and keeping track with new ideas, 3) Learning & self-management skills, 4) Building a professional personal brand, 5) Effective information discovery and seeking and 6) Professional networks & communities

Each dimension is linked with digital tools and services but also skillsets and attitudes. The focus of the thesis narrowed down to two dimensions of the framework: Building a Professional personal brand and Networks & communities. These dimensions can be seen to form a Personal learning network (PLN).

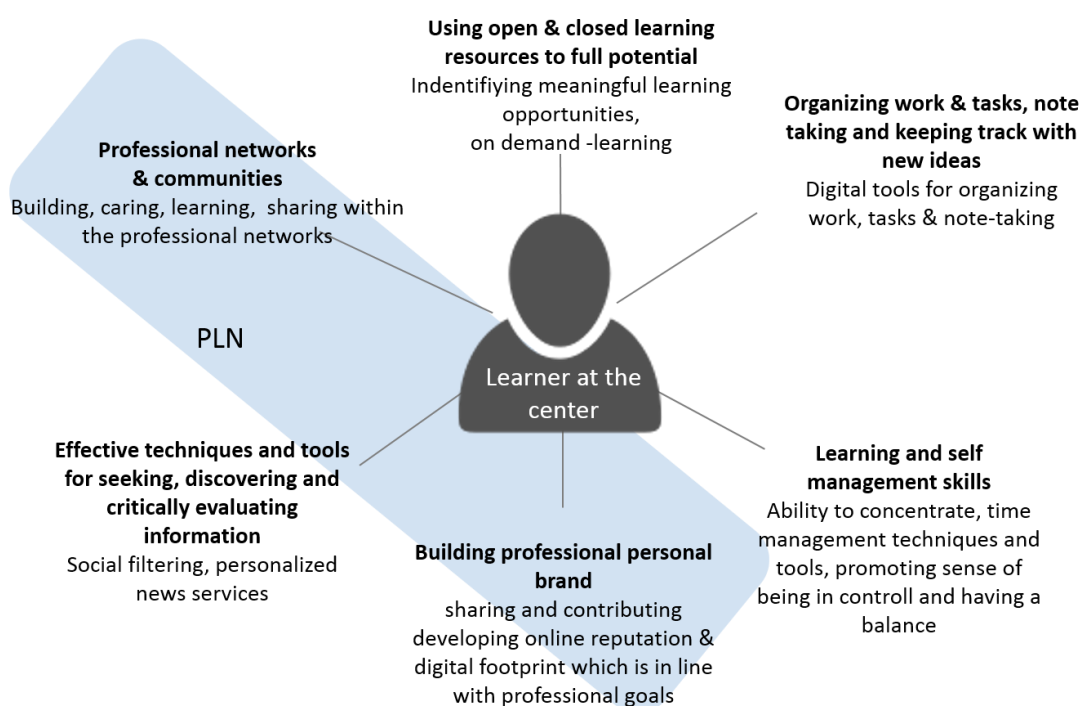


Figure 1: Framework for building a Personal learning environment for a knowledge worker by Kirsi Hanhisalo & Mervi Rauhala

It became soon obvious that the whole PLE framework is quite ambitious endeavor including various tools and skillsets. The only feasible way to design a service concept seemed to be by working iteratively; starting with some dimension of the framework, build a pilot and learn and co-create with customers. This would also be in line with the business goals.

In order to design a financially successful service concept it was decided to narrow the focus down to the PLN dimension because it was thought to have most business potential. In the connected, digitalized world companies would benefit a lot from employee advocacy. For example according to Edelman Trust Barometer report from 2013, 63 % of people trust employees and only 21 % trust the CEO to provide honest information about a company and its customer service (Edelman Trust Barometer 2013, 8). Thus the service concept can be seen as having a marketing and PR-value for businesses.

The mission of the case company is to enable visible change for customers and their workplace: their way or working should be improved in a way that can be perceived. Role of the customer is very central in learning services. The previous knowledge, motivation, values, attitudes and skills of the customer have a tremendous effect on how they construct new information; how it is filtered and interpreted (Ambrose et al. 2010). And when applying the new knowledge and skills at work, there are countless of factors which can either enable or prevent it. The value for customer is emerging or sometimes unfortunately is destroyed throughout time and is greatly depended on the context where customer is meant to apply the new knowledge and skills. Understanding the value creation logic is vital in creating learning services which have real impact.

To articulate the research problem precisely this thesis investigates *how a service concept, which helps knowledge workers to create a personal learning network enabling their personal learning in working life, can be designed with service design and Lean startup tools*. The methodologies and tools used in the empirical part of the thesis rise a sub research question: *how do service design and Lean startup differ as innovation methodologies and can they complement each other during the service design process*. This thesis also *aims to discover how well does the value creation paradigm of service logic correspond with the service concept*. To find the answers to this question, this thesis examines value creation and innovation from the perspective of service logic.

1.2 Structure of the thesis

This thesis has a theoretical part and an empirical part. The first chapter briefly introduces topic, background and key concepts for the thesis. It also sets the research questions and justifies their relevance.

The second chapter *Personal learning in the digital age* explains the background for the service concept designed in this thesis. It highlights the relevant learning theories and concepts from the field of educational sciences. The third chapter *Customer-centric value creation and innovation* discusses the paradigm shift in value creation and its implications on service innovation. The fourth chapter *Creating innovative services with service design and Lean startup approach* examines and compares the chosen methodologies; service design and Lean startup.

The empirical part starts from chapter five *Design process for the personal learning concept*. It explains the overall design process and describes the methods and tools used during the process.

The final chapter *Conclusions* summarizes the research and the key findings of this thesis.

This Figure 2 illustrates the structure of the thesis and how the theory, methods and the designed service concept are related.

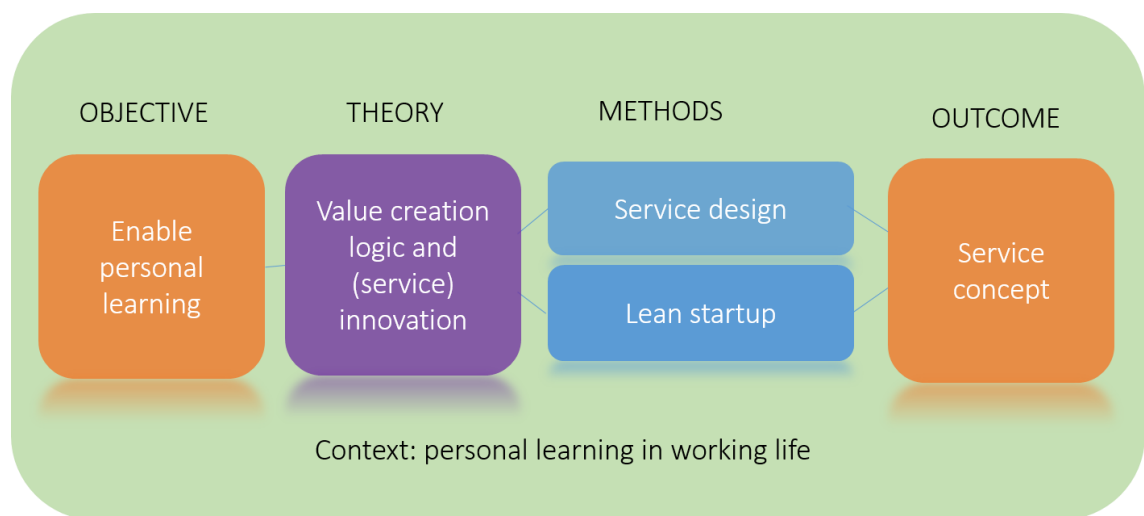


Figure 2: Structure of the thesis and relations between theory, methods and outcome

1.3 Delimitations of the thesis

Since this thesis serves a real development project for a case company and is very practice-orientated it focuses only to the theoretical frameworks most useful for the actual service concept design. Therefore it won't discuss service innovation nor the theories behind service concept in that much detail.

It is also important to point out that some of the frameworks referred to in this thesis are known and used widely in business life but have not been researched academically.

As explained earlier in the beginning of the development project the plan was to create a service concept for creating a personal learning environment but due to the lack of time and other resources it was decided to focus first on just one dimension of the personal learning environment; personal learning network.

Due to the nature of the development project all the aspects of the service concept won't be presented since the information is considered delicate. For the same reason case company capabilities are discussed only in brief. The ultimate goal of the development project is to launch the new service to market, but that is not anymore in the scope of this thesis. This thesis reports the design process, piloting the service and introduces the feedback and learnings.

2 Personal learning in the digital age

The subject of this thesis is designing a service concept for personal learning in working life. It is necessary to introduce the context for the service concept in more depth and highlight the relevant learning theories.

In this chapter this thesis discusses why from the point of view of educational sciences there is need for the skills the service concept promotes. In addition to this it will examine the trends and expert opinions on the future of work, education and learning since they have influenced the thinking and views on customer needs which led to the initial service idea and kicking off the development project.

2.1 Connectivism: learning theory for the digital age

According to Siemens (2004) the three learning theories behaviorism, cognitivism, and constructivism most often utilized in the creation of instructional environments, were developed before learning was really impacted through technology. This is problematic because theories that describe learning principles and processes, should be reflective of underlying social environments. Siemens states that these theories also fail to describe how learning happens within organizations.

Siemens argues that a central tenet of most these traditional learning theories is that learning occurs inside a person. Even social constructivist views which hold that learning is a socially enacted process, promotes the principality of the individual in learning. According to tradi-

tional learning theories learning does not occur outside of people. Learning can't be stored and/or manipulated by technology. Basically learning theories are concerned with the actual process of learning, not with the value of what is being learned. In a networked world, the manner of information we acquire would also be worth exploring and yet the traditional learning theories don't focus on that. (Siemens 2004.)

In his milestone article Siemens (2004) wants to conceptualize a new learning theory: connectivism. According to Dunaway (2011, 676), connectivism is a theoretical framework for understanding learning. It posits that learning takes place when learners make connections between ideas located throughout their personal learning networks, which are composed of numerous information resources and technologies. Knowledge emerges from an individual's learning network when she recognizes connections between concepts, opinions, and perspectives that are accessed via Internet technologies: web search engines, online information resources and databases. Connectivism holds networked information technology as a significant part of learning processes.

Connectivism is an integration of principles explored by myriad theories, most notably connective knowledge, social constructivism and network theory. Connectivism can be seen as application of network principles to define both knowledge and the process of learning. These networks are internal, as neural networks, and external, as networks in which we communicate. (Dunaway 2011, 676.) Connectivism reflects the many shifts in contemporary cultural narrative including increased recognition of systems, complexity, and interrelatedness. (Tschofen & Mackness 2011, 125).

Main principles of connectivism are presented in the Table 1.

Principle 1	Learning and knowledge rests in diversity of opinions.
Principle 2	Learning is a process of connecting specialized nodes or information sources.
Principle 3	Learning may reside in non-human appliances.
Principle 4	Capacity to know more is more critical than what is currently known
Principle 5	Nurturing and maintaining connections is needed to facilitate continual learning.
Principle 6	Ability to see connections between fields, ideas, and concepts is a core skill.
Principle 7	Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
Principle 8	Decision-making is itself a learning process. Choosing what to learn and the

	meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.
--	---

Table 1: Principles of connectivism (Siemens 2004)

Even if the individual is the starting point of connectivism, personal knowledge is seen to comprise of a network, which feeds into organizations and institutions, which in turn feed back into the network, and then continue to provide learning to individual. This knowledge development cycle allows learners to remain current in their field through the connections they have formed. (Siemens 2004.) The emphasis is on the importance of networked information resources throughout the processes of learning (Dunaway 2011, 675).

2.2 From knowledge to skills

Connectivism emphasizes the abilities to form connections and spot patterns and states that knowledge is comprised in a network. Role of individual knowledge or information is not seen that relevant and there is a shift from knowledge and information to skills and networks.

This shift from knowledge to skills is showing up in many trend reports and expert views. The Finnish Innovation Fund Sitra published a trends list in 2014 consisting thirteen mega trends which are illustrated in the Figure 3.



Figure 3: Thirteen mega trends (Sitra 2014)

One of the trends is called *Skills are challenging information*. As the humanity's collective information base is becoming easier to access, the ability to utilize that information becomes

more important than knowledge itself. School systems and educational institutions have to transform accordingly. (Sitra 2014.) The public discussion very often evolves around schools but learning in the working life should transform maybe even more. We have a large group of adults in Finnish working life who are lacking in skills and who have not yet grasped the possibilities of digital tools. As the world is more and more digitalized this gap widens and becomes more and more problematic. Some people use even the term “digital Darwinism”.

Many research firms and reports have suggested what will be relevant skills for tomorrow’s work. For example the Institute for the Future for the University of Phoenix Research Institute published a report *Future works skills 2020*. The report introduces ten important skills based on six global change drivers which are presented in the Figure 4.

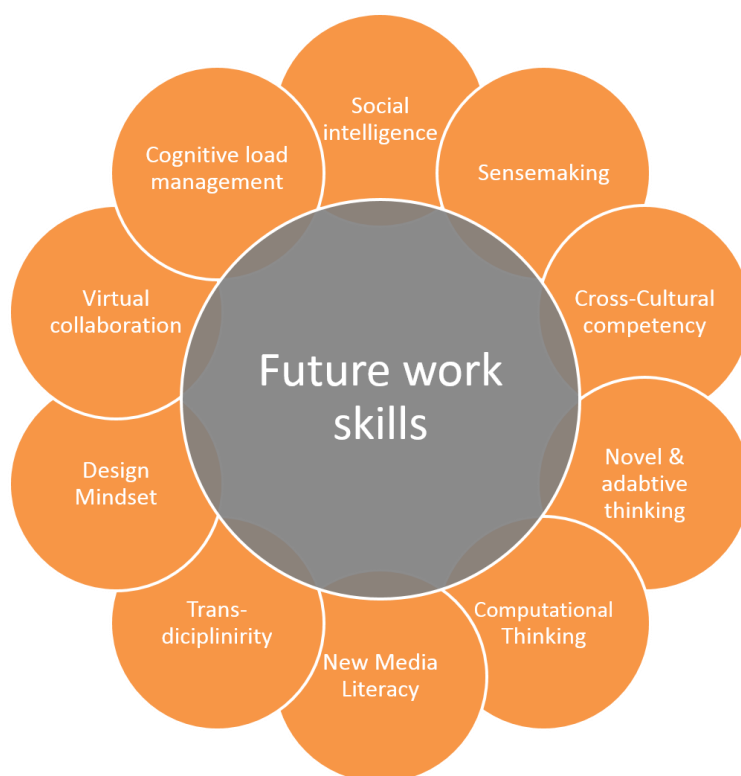


Figure 4: Future work skills 2020

Connectivism is very well in line with all the skills but especially with the new media literacy, sense making and virtual collaboration. Among the learning sciences there has been a recognition of the dramatically changing nature of what it means to be literate today. It is expected that individuals have a diverse set of cultural competencies and skills to navigate the participation in a global society and various forms of digital communication. It is still very relevant to emphasize reading, writing, and numeracy skills, but they should not be the only focus. Otherwise the broader changes in the cultural, social, and economic landscape are ig-

nored and so is the speed of access to technologies and information that are now prevalent. Hence there is a need for “multiliteracy” skills. In multiliteracy skills the scope of the traditional literacy is extended to include the diversity of media and all the modes of communication now available to learners. It also includes the varying contexts in which media and communication are utilized. According to Dawson & Siemens (2014), despite the evolving theories there is an acceptance that multiliteracies also involve an increasing set of social skills that draw upon an ever expanding set of technologies, media, and discourses.

2.3 Personal learning environments

As stated already in the introduction most workplaces are today equipped with some kind of tools that bring together people and content artefacts in learning activities to support them in constructing information and knowledge. These learning environments and their construction and maintenance makes up the most crucial part of the learning process. In fact learning environment is an important part and outcome of the learning process. It should not be considered just as a stage where to perform “learning play.” This should move learning environments from being learning management systems and monolithic platforms into being personalized learning environment which are customizable by learners. (Wild et al. 2008, 1.)

It is crucial to understand that a personal learning environment (PLE) is not an application or software. A PLE is comprised of all the tools we are using in our daily lives for learning. Many of the tools are so called social software which allows people to connect, collaborate and share. These tools are adaptable and responsive to changing learning needs and goals learners have. (Attwell 2008, 4.)

This view on PLEs is still too limited and bit outdated. A PLE should be considered to also include devices, networks, people, content and services one uses for professional purposes. The main thing is that a tool, service or network has some kind of significance for personal learning.

2.4 Personal learning Networks

When considering PLEs networks deserve extra attention. From perspective of connectivism PLE actually is the personal learning network (PLN). Ideas of collective knowledge and communities of practice are central for PLNs which are built upon the theories of social learning and connectivism. PLN consists of the learner and her contacts and colleagues with whom they surround themselves. These networks don’t always meet face-to-face or in real time. In fact the learner does not even have to personally know the knowledge collaborators. (Cooke 2011, 9.)

Personal learning networks are beneficial because they facilitate global learning and provide opportunities for collaboration that may not otherwise be feasible. PLNs enable continuous and affordable professional development opportunities. (Cooke 2011, 1, 9.)

Undoubtedly the role and impact of our personal learning networks becomes all the more significant as our working life gets more complicated and connected. Being nodes of a diverse learning networks allows us to feed new knowledge and fresh ideas in to our organizations and enable learning at the workplace. And as we share and contribute to our networks we are also building our professional personal brand and acting out as important digital and analog touch points for a company brand.

Technology is just a tool but in a way it is interesting to think that for example a smart phone or a tablet can be also seen as a physical representation of personal learning environment containing applications, access to social networks, books, magazines and other learning tools and resources. Very often the problem is that this informal everyday learning is so informal that we have not purposefully and intentionally built ourselves an environment which would be optimal regarding our professional goals, need and ambitions.

2.5 Presenting the case company

Markkinointi-insituutti, Institute of Marketing (MI) trains both individuals and companies. Despite the name Markkinointi-insituutti wants to establish itself to be more like a training company than a learning institution. End customers are working adults who want to develop themselves professionally and adopt new, better ways of working. Studies are not fulltime. They are designed so that they can be completed alongside a full time job.

The training programs and areas include: Assistant work, Entrepreneurship and business, Finance and investment, HR and personnel management, International business, Logistics and procurement, Management and leadership, Marketing and communications, Product development, Real estate and estate management, Sales, customer relationships and customer service and Competence-based qualifications. (www.markinst.fi.)

There are 90 people working directly at Markkinointi-insituutti and in extension to that, the company has network of around 100-200 professionals who work as trainers or coaches in the training programs. Main office is in Helsinki and another office in Oulu which employs 10 people. (www.markinst.fi.)

3 Customer-centric value creation and innovation

In this chapter the focus turns from context to theoretical framework of this thesis. Theory part examines value creation which is the core purpose and central process for all economic exchange (Vargo et al. 2008, 145). When there is a shift in this core paradigm it has implications on many areas of business including innovation. How should innovation be seen and seized from the new value creation perspectives?

From the academic point of view value creation is not that simple a concept. In fact there has been an ongoing debate on value creation in service marketing literature for many years. (eg. Arantola-Hattab 2013, 32; Ojasalo & Ojasalo 2015) Even though the theoretical framework of this thesis is focused on value creation, the academic debate is quite briefly discussed since the nuances between the different logics are not that relevant considering the practical thesis objectives and goals of the development project.

3.1 Paradigm shift in value creation

We live in a world where businesses and organizations face a complex landscape. It is also very clear that a new empowered customer has emerged. Customers are better-educated and better-informed. They are more creative and they are equipped with Internet-enabled information. This requires a shift from traditional and company-centric ways of implement value-creating activities to more customer-centric approaches. (Bhalla 2011, ix.) During the past ten years, the academic discussion has shifted from traditional thinking of sequential value creation process to emphasize the active role of the customer in value creation (Ojasalo & Ojasalo 2014).

In 2004 Vargo & Lusch (2004,11) conceptualized a view they call Service Dominant logic (SDL). According to SDL logic a company cannot create value; it can only offer value propositions and the consumer must determine value and participate in creating it through the process of coproduction. This new paradigm was challenging the old paradigm: Goods Dominant logic (GDL). GDL holds that the roles of the company (the service producer) and the customer (consumer) are distinct and value creation is a series of activities performed by the company and value is measured by exchange transaction. (Vargo et al. 2007, 146) Vargo & Lusch (2004, 2) state that GDL is not customer-centric and there is a need for new worldview, a new dominant logic. According to them this new logic (SDL) challenges the very foundations of economics (Vargo et al. 2008, 147).

Vargo & Lusch (2004) are by no means the only ones arguing a need for different world view and logic. Prahalad & Ramaswamy (2004, 5-6) are addressing the same issues: meaning of val-

ue and the value creation processes should move from a company and product centric view to more personalized consumer experiences, and customers should be seen active participants. Companies can no longer operate so that the only customer involvement happens at the point of transaction. The whole nature of company-customer interaction should be seen as a locus of co-creation of value.

Similar views on customer-centricity in value creation have been discussed within the Nordic school of marketing. Grönroos (2006) points out that there was an abundance of research in service marketing between years 1977-2004 where service-based models were developed and according to the research tradition of the Nordic school, service logic means that the company facilitates processes that support customers' value creation. Because customer is involved with these interactive processes, companies and customers are co-producers of the service and co-create value, but the customer may be a sole creator of value as well.

3.1.1 What is value?

Before going deeper into value creation it is relevant to ask what value is for customers. Academics (eg. Vargo et al. 2008, 146) admit that value is an elusive term. In this thesis value is defined as Grönroos (2008, 303) defines it: "Value for customers means that after they have been assisted by a self-service process or a full-service process they are or feel better off than before".

Grönroos & Gummerus (2014, 216) see that when conceptualizing value, the term *value-in-use* has gained such widespread acceptance that it is the best way to define value. Value-in-use is always determined and created by the user. Even the verb is creating value, it should be emphasized that value can also emerge from a resource integration process, and that in fact can be the normal case. Value-in-use does not exist in a singular point in time. It rather evolves as a cumulative process during usage of service. Process may also include destructive phases where negative turns are taken.

3.1.2 Value creation in Service-Dominant logic and Service logic

Next service-dominant logic and service logic are presented in more detail. Their key aspects are highlighted in order to position the theoretical framework of this thesis more firmly.

Service-dominant logic is rooted to 10 foundational premises presented in Table 2:

FP1	Service is the fundamental basis of exchange
FP2	Indirect exchange masks the fundamental basis of exchange
FP3	Goods are a distribution mechanism for service provision
FP4	Operant resources are the fundamental source of competitive advantage
FP5	All economies are service economies
FP6	The customer is always co-creator of value
FP7	The enterprise cannot deliver value, but only offer value proposition
FP8	A service-centered view is inherently customer oriented and relational
FP9	All social and economic actors are resource integrators
FP10	Value is always uniquely and phenomenologically determined by the beneficiary

Table 2: Ten foundational premises of service-dominant logic (Vargo et al. 2008, 148)

Value results from the beneficial application of operant resources, which in some occasions might be transmitted with the help of operand resources or goods. Operant resources are often invisible and intangible. They can be core competences or organizational processes. Operant resources are likely to be dynamic and infinite. Because operant resources produce effects, they enable humans both to multiply the value of natural resources and to create additional operant resources. Operand resources are usually goods and exportable things and thus tangible and finite. (Vargo & Lusch 2004, 3.)

From SDL perspective value is not in goods or in exchange. Because of this premise value is co-created through the combined efforts of companies, customers, and other actors and entities related to any given exchange but ultimately the value is always determined by the beneficiary (customer) To put it other way value is co-created by the service offerer and the service beneficiary through resource integration. (Lusch & Nambisan 2012, 1.)

According to SDL there is no value until an service offering is used or experienced and in order that to happen, offerings must be integrated with other market-facing (company) and non-market-facing (personal/private or public) resources. For example a car has no value for a person unless she has skills to drive it, a driver's license so that she is not breaking a law, access to fuel and roads to drive on. (Vargo et al 2008, 148.) So value is created when service offering is used.

When Vargo & Lusch (2004) first published their views on SDL they used a term value-in-use to emphasize the way value is created. Later the term value-in-use has developed into broader

view value-in-context. Vargo et al. (2008, 149) state that SDL had captured this equivalence of participants and their roles in one of its fundamental premises: all economic and social actors are resource integrators but also time, place and network relationships are relevant for value creation.

Grönroos et al. (2014, 206) have proposed an alternative view called service logic (SL) and they are criticizing SDL for being based on a metaphorical view on co-creation and value co-creation. They also see that SDL is firm-driven since the service provider is seen to drive value creation and therefor wants to make a distinction between SDL and service logic. SL has a more analytical approach for value creation. Value is seen to be customer driven; it is created in the customer processes. However in some circumstances, service providers have a possibility to engage with their customers and co-create value with them. So service providers are not restricted offering only value propositions. In some situations they can directly influence customer's value fulfillment. (Grönroos & Gummerus 2014, 206.)

Grönroos & Gummerus (2014, 208) state that SL provides managerial principles related to value creation. According to SL service is the use of resources in a way that facilitates customer's value creation by supporting their everyday practices may those be mental, physical, possessive or virtual. Therefor the goal of marketing is to enable reciprocal value creation among the actors by engaging the service provider with customer's processes with service as the facilitator.

Throughout the customer's value-creating process, value-in-use evolves in a cumulative process or sometimes is destroyed. Between customers and individuals in their ecosystem, there are social value co-creational activities that influence customer's independent value creation process. (Grönroos & Gummerus 2014, 208.)

In a customer's value generation sphere, which is closed to the service provider, customers/users, create value in the form of value-in-use, emerging out of or being created from integrating new resources with existing resources and applying skills and knowledge previously held. Value-in-use is uniquely, contextually and experientially perceived and determined by customers. Companies as service providers are value facilitators in a value generation sphere closed to the customer (provider sphere) such that they develop and provide potential value-in-use for customers/users. (Grönroos & Gummerus 2014, 208.)

If a platform of co-creation is established, service provider can through direct interactions among the actors in the value generation process, engage with customer's value creation and opportunities for co-creation of value arise thus companies are not only restricted in making value propositions. Using a platform of co-creation companies as service providers can

through direct interactions actively influence customer's value fulfillment and keep promises made. The value generation process is illustrated in the Figure 5.

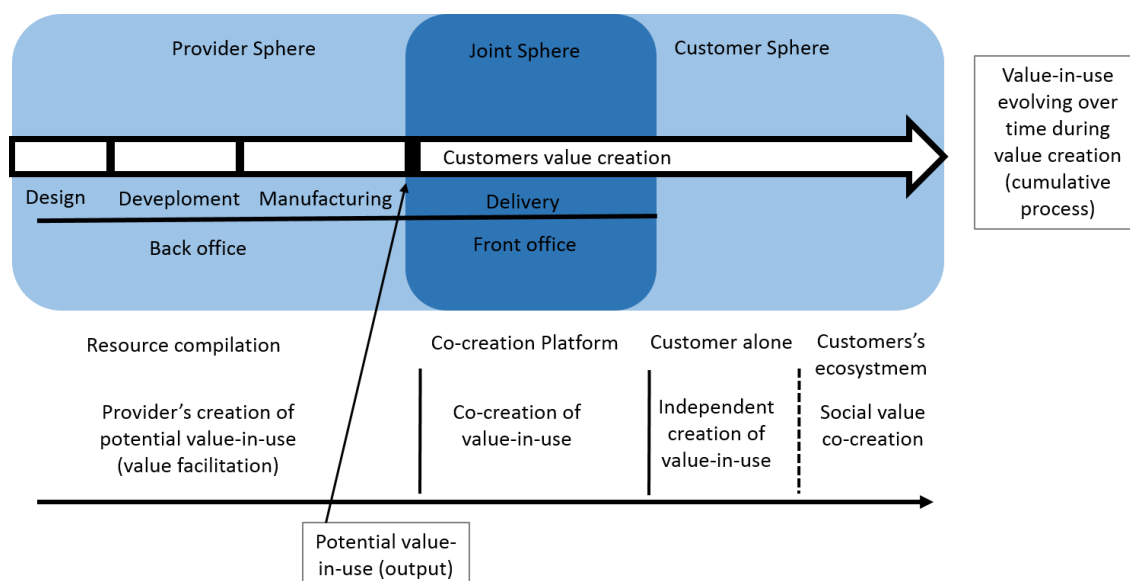


Figure 5: Value generation process: value creation and co-creation according to the service logic (Grönroos & Gummerus 2014, 218)

3.1.3 Value creation in Customer-dominant logic

Recently a third view has been proposed: Customer-dominant logic (CDL). CDL argues to be an alternative to GDL and SDL. It introduces a new perspective: the customer's reality and life is the starting point, not the visible service processes or even encounters or relationships. (Voima et al. 2010, 4). Customer is positioned in the center, not the service providers, interactions or the service system. Approach differs from traditional customer orientation by shifting the viewpoint even further to the customer's side. CDL is not focused on what companies are doing to create services customers are preferring, it is focused on what customers are doing with the service to accomplish their goals. (Heinonen et al. 2009, 4.)

With this heavy focus on the customer, even SDL is seen too provider dominant. It is considered to be a more advanced company based view. The following quote from Heinonen et al. (2009, 2-3) highlights well the essence of CDL: "What needs to be addressed is how value emerges for customers and how through a sense making process customers construct their experience of value of a service provider's participation in their activities and tasks."

According to Voima et al. (2010, 2) applying CDL perspectives implicates following conclusions: Value is seen to form in cumulated reality of the customer and it can't be seen always actively and mutually created. Value is not restricted to cognitive or even a resource per-

spective. It is socially interpreted and experienced in experimental-phenomenological manner. Value needs to be seen from a longitudinal and multi-contextual perspective encompassing multiple different personal and service related value frames. Value is not isolated since the reality of the customer is interconnected with the realities of others.

Figure 6 demonstrates the key differences between provider-dominant logic and customer-dominant logic.

	Provider-dominant logic	CD logic
<i>Co-creation</i>		
Involvement	Customer involved in co-creation	Company involved in customer activities
Control	Company controls co-creation	Customer controls value creation
<i>Value-in-use</i>		
Visibility	Focus on visible interactions	Also considers invisible and mental actions
<i>Customer experience</i>		
Scope	Formed within the service	Emerges in customers' life
Character	Extraordinary and special	Also mundane and everyday

Figure 6: The provider-dominant versus customer-dominant logic of service (Heinonen et al. 2010, 542)

Heinonen (2009, 9) stresses that value emerges mostly beyond the visibility of companies. Therefor companies should try to understand the value creation processes of embedded in customer's contexts and practices. Building on social construction theory, CDL sees context as dynamic and dependent on the role of the customer and also position and interaction within a social structure.

Central question for companies is how they can support ongoing activity of the customer and their experience structures (Heinonen 2009, 13). Rather than focusing on involving their customers in co-creation, service companies should focus on involving themselves in the customer's business or life and in order to understand their customers more deeply, companies should revise their mindset, tools and approaches. (Heinonen 2009, 15.) They should do for example more in-depth ethnographical studies (Heinonen et al. 2010).

3.1.4 Customer-centric value creation

What conclusions should one draw from the discussion on different academic views on value creation? When considering the objective of this thesis the most relevant issue lies in the understanding of the paradigm shift for customer-centric value creation and what implications it has on innovation. In this thesis value creation is seen to be a cumulative process evolving

over time. Value is created in the customer's processes and in their lives. Value is not always actively created by the customer; it can also emerge and is dependent on the context of the customer. Since this thesis seeks practical contributions the terminology of value creation logics is simplified following the example of Ojasalo & Ojasalo (2015) who are using the term service logic to cover all the three contemporary customer value focused business logics: Service-dominant logic, Service logic and Customer-dominant logic.

3.2 Service logic and innovation

This thesis focuses next on innovation since adopting service logic has profound implications on it. How is innovation seen from service logic perspective and where should the focus be when finding new innovation opportunities?

3.2.1 Defining (service) innovation

Innovation can be defined as “result of recombining or re-bundling diverse resources that create novel resources that are beneficial (i.e., value experiencing) to some actors in a given context; this almost always involves a network of actors, including the beneficiary (e.g., the customer).” (Lusch & Nambisan 2012, 16)

Should there be a difference between service innovation and product innovation? According to service logic all innovation is service innovation since service is the fundamental unit of exchange. (Vargo & Lusch 2004, 6) As explained earlier SDL defines the creation of value in a customer-centric way; value it is not in the goods or services per se. This makes the traditional dichotomy between goods and service obsolete. (Lusch et al. 2007) According to Lusch the traditional way of seeing innovation is still based too much on goods-dominant logic and it focuses on innovation from a manufacturing point of view. Innovation should be seen from a service driven perspective. (Lusch 2013, 8-10)

Michel et al. (2008, 50) state too that all innovation is service-logic innovation. They define innovation simply as “finding new ways of co-solving customer problems, whether they are fully recognized or completely latent to the customer.” They argue that despite the fact whether the customers have recognized their needs or not, the disruption to the customers' behavior and to the way how they recognize and realize value, is the opportunity to manage innovation. Companies should innovate the customer's role to create value and alter how they integrate value and reconfigure their value networks and seize the opportunities this approach to innovation provides. Michel et al. (2008, 53) propose that in successful service-logic innovation at least one role of the customer (buyer, user, payer) was changed and that service-logic innovations are triggered by embedding know-how into objects, changing the

integrators of resources, and reconfiguring the value constellation, or combining any of these forces.

According to Michel et al. (2008, 52) the main tasks that form the core of the service-logic innovation are understanding the service that a customer requires from an offering, improving the integration of value with the customer, reconfiguring value constellations to exceed customer expectations, and continuously inventing new value propositions.

Lusch & Nambisan (2012, 1) are introducing a broadened conceptualization of service innovation which emphasizes four factors: innovation as a collaborative process involving a diverse network of actors, service as the application of specialized competences for the benefit of another actor or the self and as the basis of all exchange, the generativity unleashed by increasing resource liquefaction and resource density and resource integration as the fundamental way to innovate.

When innovation is seen through the service logic lens, value creation goes beyond company's activities and includes customers and stakeholders through co-creation. The attention is not only in the company and its customers, but in the entire service ecosystem. (Lusch 2013, 8-10) which offers an organizing structure for a network of actors to come together to exchange resources and co-create value. (Lusch & Nambisan 2012,1)

Mele et al. (2014, 630) stress the need for framing and managing innovation processes in companies from a SDL perspective. There is a clear need to move innovation beyond the conceptualization: from "products and services" to "service and value" and from "buyer-seller dyads" to "ecosystem relationships" and from "closed/linear process" to "open/co-created process".

Lusch & Nambisan also point out service platforms which facilitate access to resource bundles and thus serve as the venue for innovation. Edvardsson et. al (2010, 6) state the same idea of resource integration in bit different words. They claim that if service innovation is seen through the service logic lens, the main challenge is to create an attractive value proposition and put together a constellation of resources that are required for value co-creation. To be successful, this new way of value co-creation should provide great customer experiences.

3.2.2 Customer role in service innovation

According to service logic customer should be seen as operant resource on which the firm can draw to foster innovation and competitiveness (Vargo and Lusch 2004). Empirical findings support this suggestion. For example Ordanini & Parasuraman (2011, 18) discovered in their

study that in the innovation process employees, business partners, and customers are all operant resources.

When discussing service innovation it is relevant to ask what the role of the customer is.

When seen from service logic perspective there are three different roles which depend on the service exchange and what kind of resource integration is to be achieved. (Lusch & Nambisan 2012, 31-32) The three roles are illustrated in the Figure 7.

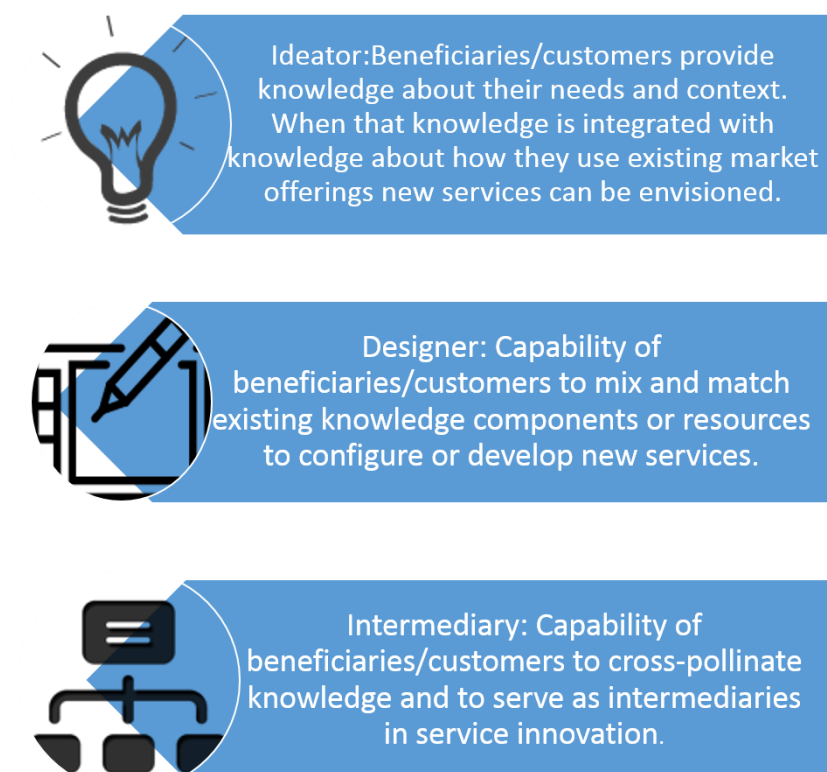


Figure 7: Customer roles in service innovation

This list could have a fourth role which would be that of an investor as Ordanini et al. (2011, 244) suggest. According to them customer's role has recently expanded also to include investment support through crowd-funding.

4 Creating innovative services with Service design and Lean Startup approach

This report now moves on from the theory to introduce the methods and tools used in empirical part of the thesis: service design and Lean startup. Both are popular, contemporary innovation methodologies with a large community of practitioners.

Many academics admit that service logic is not very easily applied to business practices and despite their good intentions many companies seem to operate according to goods-dominant logic. Also many tools and models used in new service development and service innovation have been created from the GDL world view. They are very provider-dominant and focus on processes controlled by the company. (Ojasalo & Ojasalo, 2014.) Managers should be aware of the dominant logic and how it affects the decision-making process (Mele et al. 2014, 631).

It is relevant to ask in this thesis how suitable are these methodologies, service design and Lean startup, in realizing service logic and how do they contribute in creating innovative service concepts? The debate around these two methods is discussed: how do practitioners and academics view their usefulness and focus?

4.1 Need for customer-centric innovation methods

It might be hard to find a business today that would argue against the importance of innovation. The question is why are they not doing it? For one, innovation is hard. Studies show that almost half of the new products and services are not on the market anymore five years after launch. (Zeithaml et al. 2008, 187) This is how poorly established companies are doing with their new offerings and startup companies are performing even worse. A recent research by Shikhar Ghosh reveals that 75 % of start-ups fail (Blank, 2013, 4). Reasons for failing in new service offerings and business ventures vary, but the ultimate root cause is of course that for one reason or another, the new offering just didn't find enough customers willing to pay enough money for it.

What is the best way to raise your odds in succeeding? How to identify innovation opportunities that will succeed in the market and create viable, new business and desirable services? As Lance Bettencourt (2010, xx, 1) puts it, all innovation experts agree that innovation entails the generation of valuable concepts based on understanding of customer needs. The focus must be in the customer, not in the service solution. Literature suggests that the best way to tap into customer needs and to find, new innovative ways to help them create value, is to co-create the new offerings with customers. Collaborating with customers turns them into an operant resource on which the company can draw to foster innovation and competitiveness (Vargo & Lusch 2004). There is clearly a need for customer-centric innovation methods.

People are in the core of all services. Without users/customers there is no service. Therefore the focus should be in understanding how the customer perceives and creates value. In order to make sense of their value creation, companies have to understand the reality of the customers, their needs, expectations and values. (Tuulaniemi, 2011, 71.) Service design searches for opportunities to improve the 'value in use' by exploring and trying make sense of custom-

er value co-creation in its real context (Sangiorgi 2012, 98). Lean startup on the other hand has in its core the idea that biggest waste is creating a product or service that nobody needs and this concept is naturally highly relevant for any strategy or method aiming to create innovations (Mueller & Thoring 2012, 2).

Innovation is not only something new, but it also is economically viable and technically feasible. However the pioneer of design thinking Tim Brown (2009, 19) adds one more criteria. He argues that an idea must be not only viable and feasible but also desirable as Figure 8 displays.

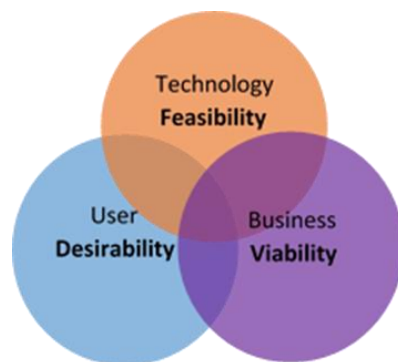


Figure 8: Criteria for successful innovation, (Brown 2009)

Companies might focus too much on the feasibility and viability. They start with a new technological invention, or with a business model, but user's view is forgotten. These attempts fail, because the solution does not solve an actual problem for the user and therefore is not desirable. (Mueller & Thoring 2012, 6.) It can be argued that customer-centric innovation methodologies and tools will not only improve the service experience and help in identifying the customer needs, but also increase the chance of new service offering to succeed in the market. In this thesis customer-centric innovation approaches, service design and Lean startup are used in designing a service concept in order to meet all the above mentioned criteria: feasibility, desirability and viability.

4.2 Introducing service design

In this chapter service design; methodology used in the empirical part of this thesis is introduced. However it is important to emphasize that service design is not seen only as a set of methods or a toolkit or even as a process but as more profound way of thinking about services, innovation and business in general.

Service design can in fact be seen as a way to realize service logic within a company. Principles of service design support service logic since the process, and outcomes of service design are focused on what customers want to achieve and what do they do with the help of the service. Also many methods and approaches of service design, such as gaining deep insights with qualitative research helps in forming a picture of customer needs and their world. (Ojasalo & Ojasalo 2014.)

What is service design? According to Stickdorn (2010) it is as “an interdisciplinary approach that combines different methods and tools from various disciplines. It is a new way of thinking as opposed to a new stand-alone academic discipline.” Stickdorn argues that service design in fact should not be defined in a way which might constrained its evolution. Tuulaniemi (2011, 15) notes the same thing. Service design practices what it preaches and is developing constantly.

Moritz (2005, 39-40) defines service design as “the design of the overall experience of a service as well as the design of the process and strategy to provide that service. It is about understanding client, organization and market, develop ideas, and translate them into feasible solutions and to help implementing them. It is involved in the ongoing lifecycle of services and offers continuous evolution.”

Sometimes service design is seen as design thinking applied in service development and innovation but for example Polaine et al. (2013, vii) see that service design is distinct from design thinking because it is also about doing design and implementing it.

4.2.1 Principles of service design

Stickdorn (2010) states that service design thinking has five basic principles. Service design is *user-centered*. Service should be experienced through the customer’s eyes. Service design is *co-creative* meaning that all stakeholders should be involved in the design process. Service design is *sequencing* and service should be visualized as sequence of interrelated actions. Services should also be visualized in terms of physical artefacts so service design can also be seen *evidencing*. Finally service design is *holistic*. The whole environment of the service should be taken into account

4.2.2 Service design from value creation perspective of Service logic

How does service design see value creation? Kimbell (2010) says service design helps organizations and stakeholder co-create value. She says that although many disciplines have something to contribute to service design marketing claims to have done that in significant ways.

She states that marketing is about creating and building relationships with customers to co-create value and this idea has diffused through contemporary design and service design in particular. It is relevant to include Kimbell's view in this thesis since there is not much academic discussion related to how service design and service logic are linked. It is yet worth noting that Kimbell refers to the original views of service-dominant logic and she seems to be using the term co-create value in a way that remains ontologically a bit unclear.

Wetter-Edman (2011, 99) claims in her licentiate thesis where she conceptualizes service design, that design practice is the type of competence that complements and pushes the realization of a service-dominant logic¹. If an organization adopts the service-dominant logic perspective, the role of the users and their contexts becomes central if they want to understand value creation. Wetter-Edman has compared SDL and design thinking; where do they overlap and she comes to the conclusion that SDL concept of value-in-context is equivalent to the focus of design on touch-points and use of different visualization techniques developed to communicate temporal and intangible aspects. (Wetter-Edman 2009, 10.)

4.3 Introducing Lean Startup approach

The other important toolset for the empirical part of this thesis is the Lean startup approach. Although Lean startup is not considered particularly service oriented, it offers great tools and methods for service innovation by focusing also deeply on customers and aiming to create sustainable business models. After all, a new service offering might totally fulfill customer needs and help them create value splendidly, but not in a way that creates viable business for the company itself.

Being a fairly new concept, especially for service designers, it is relevant to explore Lean startup more deeply. The main principles and methods of Lean startup are explained. This thesis also discusses how Lean startup can contribute to service innovation, and what are the main differences compared to service design.

4.3.1 Principles of Lean startup

The principles, methods and ideas of Lean startup date back to 2008 when Eric Ries first coined the term. Steve Blank introduced a concept of customer development in his book *Four steps into epiphany* in 2003 by arguing that startup companies aren't just smaller versions of larger companies and managing them should be done differently. The focus should not only be in the product but marketing and finding customers was as crucial. (Blank 2013.)

¹ Wetter-Edman is referring specifically to Service-dominant logic.

Ries came up with Blank's ideas of customer development and combined them and his learnings as entrepreneur with Japanese Lean ideology. Lean manufacturing was originally developed at Toyota Company by Taiichi Ohno and Shigeo Shingo. It altered the way supply chains and production systems were run. One of the key concepts of Lean thinking is the value-waste -dichotomy and the importance of recognizing what activities create value and which are creating waste. This is also in the core of the Lean startup approach. All activities should be done in a manner that maximizes value and minimizes waste. (Ries 2011, 28.)

Today the Lean startup is a global movement joining together entrepreneurs and intrapreneurs² to discuss and apply Lean startup ideas. There are organized communities in over hundred cities around the world (Ries 2011, 16) and even business schools have started to teach the Lean startup principles and methods (Blank 2013, 4).

The main principles of Lean startup approach are: 1) Entrepreneurs are everywhere. In small new companies and large enterprises alike, 2) Entrepreneurship is management. It requires management which is suitable to the conditions of extreme uncertainty, 3) Validated learning. The ultimate goal of the start-up is to learn how to build a sustainable business, 4) Build-Measure-Learn is the fundamental activity where start-up turns ideas into products and measure how customers are reacting on them. If they are not responding positively, it's time to *pivot*, which means a bigger course change in the strategy. (Ries 2011, 17-18.)

Ries (2011, 30) stresses that "the goal of a startup is to figure out the right thing to build—the thing customers want and will pay for—as quickly as possible." Therefor Lean startup actually is a new way of developing innovative new products that emphasize fast iteration and customer insight. Maurya (2012, 4) states that startups start with an initial vision and a plan A of how to realize that vision. Usually the plan A however won't work. The plan has to be systematically tested and refined accordingly. Because validated learning is the most important yardstick of start-up progress, it should be measured objectively. Ries (2011, 117) has developed a technique called innovation accounting to provide a framework for this. Idea is to find simple, actionable metrics which help you validate if you are making progress.

Lean startup concept was developed in the Silicon Valley among the venture capital funded technology startup companies. Is it really applicable to more established companies as well? Blank actually sees that the Lean startup approach may deliver its biggest payoff for large companies. Small, already established companies could also really benefit from the approach. (Blank 2013.) Ries argues the same. He doesn't even consider startup to be a company. Ac-

² Intrapreneurship is the act of behaving like an entrepreneur while working within a large organization. (Wikipedia accessed 4.1.2013)

According to his definition, startup is a “human institution designed to create a new product or service under conditions of extreme uncertainty”. (Ries 2011, 37.)

When using the terminology of the Lean startup approach it is important to remember the origins. One goal was to help startups not to focus too much on developing their service while neglecting to find paying customers and create a sustainable business model. Therefore the concept of customer development has to be understood from that point of view, and not try to see it through the lens of service logic. According to Cooper & Valikovits (2010) customer development process, which is in the core of Lean startup, has these four basic phases which are illustrated in the Figure 9: Customer Discovery, Customer Validation, Customer Creation and Company Building.

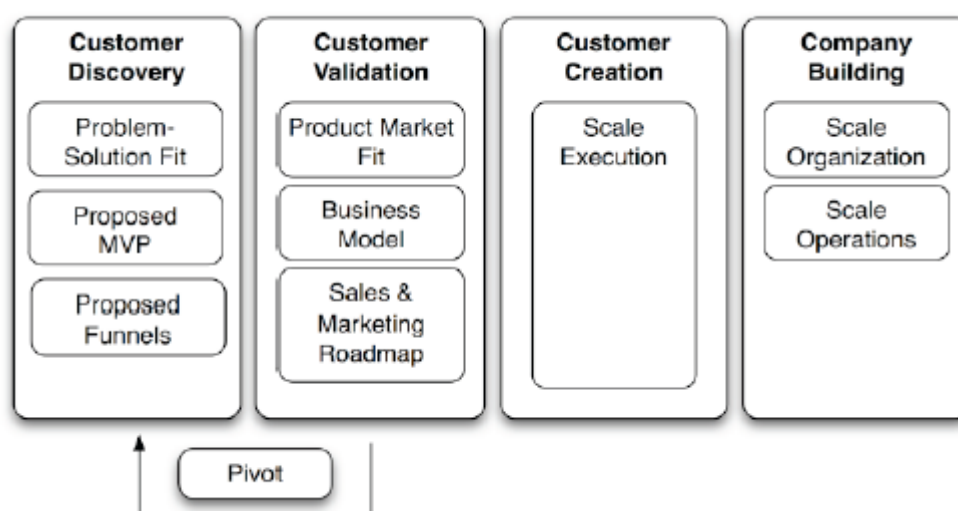


Figure 9: Customer development process, Cooper & Valikovits (2010, 9)

4.3.2 “Leave the building” to learn from customers

Maurya (2012, 8) states that a startup goes through three stages which are: 1) Problem/solution fit, 2) Product/market fit and 3) Scale.

In the first stage, the key question is whether a startup has a problem worth solving. Is it something the customers will want, are they willing to pay for it and can the problem be solved? The philosophy is that there has to be a sufficient level of “customer pain”. Without that, they won’t be paying for a solution. According to the Lean startup methods, this principal question of problem/solutions fit, is attempted to be solved by using a combination of qualitative customer observation and interviewing. The famous quote from Steve Blank goes: “Leave the

building” (Blank 2003, 85). Because of the great uncertainty, startups need extensive contact with their potential customers in order to get sufficient insight (Ries 2011, 92).

Talking to customers is the fastest way to learn. Maurya (2012, 71) argues that the first customer interviews should be about learning “what you don’t know you don’t know” and because of that surveys or focus groups won’t help much. Surveys assume that the question to ask, are already known and in this case the questions are not clear. It’s fair to say that Lean startup approach relies heavily on qualitative research. One of the important things to discover in problem/solution -fit stage is to discover if and how the customers are currently solving the problem. The techniques can include informal observation and structured customer interviews. Parallel to validating the customer problem, startup validates the customer segment that has the problem. (Maurya 2012, 82.)

According to Maurya, interviews should preferably be done with open ended questions in face-to-face situations so that body language and expressions are seen. They tell a lot how the customer is really feeling and thinking. Quantitative research can be useful later when it can verify the results, but initially, one should always start with interviews. When a startup is trying to test the problem/solution fit, and validate whether they have found problem worth solving or not, they should try to validate what customers are saying in an interview. If a customer for example states that a problem discussed in the interview is of significance, it should be validated by the fact that she is currently trying to solve the problem somehow. (Maurya 2012, 72-74.)

Later the validation might come through a fact that a customer is actually willing to sign up and pay for the product (Maurya 2012, 138). This is a good principle to keep in mind regarding every kind of customer research. “Don’t ask customers what they want, measure what they do” (Maurya 2012, 73).

4.3.3 Engaging early adapters

The Lean startup methodology aims at integrating customers in a constant feedback loop. Also after validating the problem/solution fit, the customers are kept tightly in the process. Preferably a startup should find early adapters who are willing to co-create the product and who also are the first paying customers.

Early adapter is one of the key concepts in Lean startup. Early adapters are customers who want to be the first ones to adopt the new product or service. They may not want the product to be too ready and polished, but rather to use their imagination to fill in what the solutions is missing. (Ries 2011, 97.)

Early adapters are extremely valuable for startups. When the startup is in a stage where the new solution concept is more defined, it's time to make a demo and conduct solution interviews. In this stage it's wise to also include some new prospects in addition to early adapters and customers who have been with the product since the problem/solution fit stage. (Maurya 2012, 103.)

4.3.4 Validated learning

Ries (2011, 18) states that startups don't exist to make stuff, money or even customers. They should focus on learning how to build a sustainable business. This learning is to be validated in a scientific manner by formulating hypotheses and then running frequent experiments. Experiments help testing weather the vision of the start-up is viable. Ries points out that many current business and engineering philosophies, such as design thinking, focus on the quality of customer experience. From a startups point of view, that is not that beneficial since a start-up is in a situation where they don't who the customer is. Startups should in fact be willing compromise with their traditional professional standards and focus on the process of validated learning. The validated learning consists of learning loops as illustrated in the Figure 10. A competitive advantage comes from going through these build-measure-learn -loops faster than anyone else. (Ries 2011, 108-109, 111.)

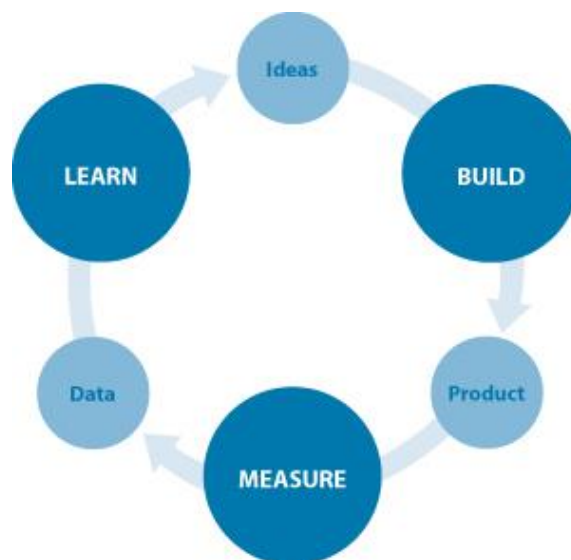


Figure 10: Build-Measure-Learn -feedback loop (Ries 2011, 81; Maurya 2012, 12)

4.3.5 Minimum viable product

Minimum viable products (MVP) are essential for validated learning. MVP helps startups to start the process of learning as fast as possible. It is important to notice that the goals of MVP are different than in using a prototype or a concept test. Main goal of a MVP is to test the business hypotheses, not to get feedback or help improve the design or technical features. (Ries 2011, 96.) MVPs can range from very simple tests to prototypes. Deciding what kind of MVP to use in which stage of the startup lifecycle, requires judgement. The only rule that applies in every situation is that when in doubt, simplify. (Ries 2011, 98.)

Blank & Dorf (2012, 200) encourage startups to create low fidelity MVPs as soon as the company is started in order to test whether anybody else shares the same vision for customer need or problem. Low fidelity MVP can be as simple as a website describing the severity of the customer problem, showing some drafts and mock ups for the solution and encouraging people to sign up to learn more. The solution prototype can be made quickly with PowerPoint or other easy tools.

One of the most famous MVPs in tech start-up scene is the video made by Dropbox CEO Drew Houston. A 3 minute video shows how the cloud based file sharing service Dropbox works. Houston cleverly planted some tech circle inside jokes in the video which were appreciated by the community of technology early adopters. Dropbox got 75 000 people to sign up to their beta waiting list almost overnight. The company wanted to validate whether there was interest in the kind of file sharing service they were planning to build, and the video helped them validate their assumption. Thus it was a minimum viable product. (Ries 2011, 100-101.)

4.3.6 Lean startup from value creation perspective of Service logic

For the working economic reasons it was not possible to make a rigorous conceptual analysis on how Lean startup is in line with service logic view on value creation, but some conclusions can be drawn.

Ries (2011, 38) for example says that startups are using many kinds of innovations from novel scientific discoveries to bringing a product or service to a new location and that the most important element of startup innovation is the level of uncertainty: Will the new offering find customers who are willing to pay for it? According to this view Lean startup is not interested in value creation logic behind the innovation as such. The focus is elsewhere. It does not necessarily mean that Lean startup tools would somehow be in conflict with applying service logic in innovation as in some extend the empirical part of this thesis demonstrates.

4.4 Lean startup and service design as customer-centric innovation methodologies - where do they overlap and where do they differ?

As stated in the introduction of this thesis the sub research question is related to methods and tools used in the design process. As presented earlier there are views that design practices can push service logic and help companies realize it in practice (eg. Wetter-Edman 2011, 99). There has however been no academic attempts to explore how well Lean startup goes together with service logic, therefore the focus is on more practical aspects: how do Lean startup tools contribute to service innovation and what are the key differences between service design and Lean startup as innovation approaches? Lean Startup has many similarities with service design but there are also differences.

For the sake of precise terminology it is also relevant to clarify that many of the sources used are referring to design thinking not service design. Also it's worth mentioning that due to the lack of academic sources, this thesis turns to practitioners.

4.4.1 Discussing Service design and Lean startup as innovation methods: views from practitioners

Furr & Dyer (2014) discuss popular innovation methods and present their views on which methodology works best in different phases of the innovation process. According to Furr & Dyer (2014) innovation process has four stages: Insight, Problem, Solution and Business model. Each part of the process is relevant in order to create a successful and scalable business.

The Figure 11 illustrates their view that design thinking covers three phases on the process from Insight to Solution, but does not offer tools for the Business model -phase. Lean startup on the other hand does not cover Insight and Problem phases, only Solution and Business model. Based on their views the methodologies are focusing on different phases.

AN END-TO-END INNOVATION PROCESS

Adapting the tools honed by start-ups.

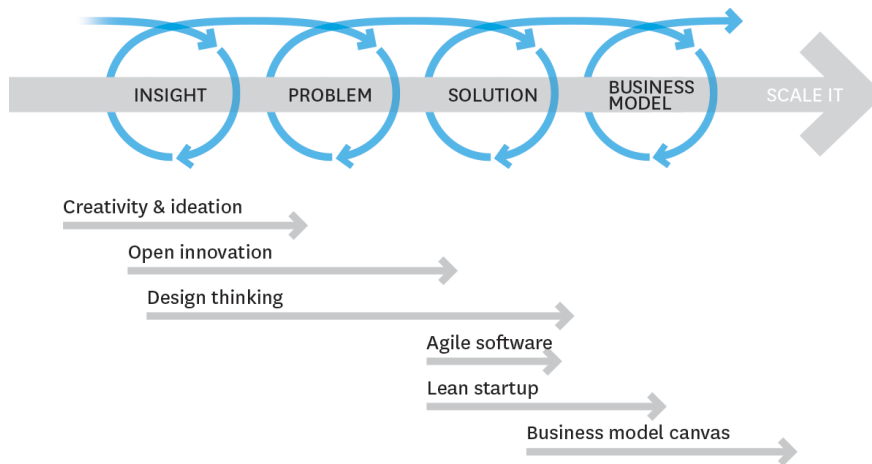


Figure 11: Innovation process and which tools work best in which phase (Furr & Dyer 2014)

What do Lean startup practitioners view service design and vice versa? It's important to notice that Lean startup practitioners commonly use the term product which of course has a quite goods-dominant logic ring to it (eg. Ries 2011; Maurya 2012; Blank 2013). Eric Ries does not talk about service design but he does refer to design thinking. He states that the design thinking focus on the quality of customer experience is not useful for startups since they don't know who the customer is. Startups should just focus on the process of validated learning. (Ries 2011, 108-109, 111.)

Tenny Pinheiro (2014), entrepreneur and service design practitioner who has developed a framework he calls Service startup, argues that Lean startup as such is not the best way to create innovative new services but when properly combined with design can be a great asset. Pinheiro also argues that Ries's view on design thinking is of the point and he has misunderstood design, its origins, and underlying purpose. According to Pinheiro Ries seems to confuse design thinking with a product development idea or placing it mistakenly on the context of an ideation technique.

Pinheiro (2014) refers to the milestone article of Vargo & Luch (2004) and SDL and goes on blaming Lean startup for being product driven. He compares the approaches on six different terms as shown in Table 3 and comes up to the conclusion that there are such deep conceptual conflicts that one can't for example take a tool from one approach a mix it with the other. This view seems pretty radical.

Service design	Lean startup
Service design is service oriented	Lean is product oriented
Design searches for solutions throughout a holistic approach, mixing practices and fields.	Lean is based on scientific thinking, and as such it preaches the pursuit of a solution through specialisation and division (cohorts), analysis and tests.
Design is outside-in and co-participative, and involves the end-user in the early stages of conception.	Lean is inside-out and it involves the creation and hypotheses first, then the involvement of users in testing and validation procedures.
Design welcomes variation and believes that in variation lies the source of potential innovations.	Lean is about reducing variation in production and believes that this reduction helps to better predict what you will get out of the resources you are committing to the process.
Design is empathy driven. All value created is rooted to the deep understanding of how people live, work and relate to others. The ability to deep dive in the users world and get valuable insights out of it is an intuitive ability for designers.	The TPS, Lean's precursor, has Genchi Gem-butsu, a philosophy that states that a problem to be solved needs to be understood where it takes place. This philosophy inspired the phrase often used by startups: "get out of the building." Even though Genchi calls for some empathy, it is still a troubleshooting approach, not a pre-design empathy building practice
An organization, product, or service can't create or deliver value. It can only propose value, since value is cognitively created in the user's mind. This is the basis of the belief that service journeys are always co-created between the provider and the user.	Value is created and delivered by the organization.

Table 3: Comparing service design and Lean startup (Pinheiro 2014)

Even though Pinheiro (2014) is referring to SDL in his book, his definition of value differs from the service logic view of value creation. He states that value is cognitively created in users mind while service logic stresses that value can also emerge over time and is not restricted to cognitive or even a resource perspective. It is socially interpreted and experienced in experimental-phenomenological manner (eg. Grönroos & Gummerus 2014, 208; Voima et al. 2010, 2).

4.4.2 Expert interview

According to Moritz (2005, 193) talking with specialist and experts can reveal insights and help in understanding the new environment and the professional outside perspective is helpful in establishing a new network of understanding. In this thesis the expert interview was not used in designing the concept but to make sense of the methods and tools.

In order to understand better how Lean startup tools are used in developing new services and how they are compared to service design, Risto Sarvas, D.Sc.(Tech.) was consulted in January 2015. He is a researcher and teacher at Aalto University and service design lead at software design and development company Futurice. Futurice uses both service design and Lean startup methods in their client projects. The interview was conducted face to face and lasted about an hour. The goal was to find out how Sarvas sees the two methodologies; service design and Lean startup, and how they differ according to his experience.

Sarvas sees that neither service design nor Lean startup have yet established themselves very strongly and therefore it's interesting to explore them. Sarvas sees that when a company discovers that optimizing their current business model is no longer enough to keep them competitive and they have to explore new opportunities Lean startup approach is useful. They can help companies on their path from being production oriented technology-centric companies into customer-centric service companies. Lean startup is a framework in which the messy innovation process can take place. It provides a systematic approach and rigor that drives the innovation efforts.

Sarvas feels that Lean startup differs from service design in use of quantitative data for learning. Service design does not make use of analytics and technology enabled quantitative data as Lean startup does. Sarvas also sees that in service design the team members often present different disciplines such as designers, engineers and marketers and the team members tend to stay in their traditional roles within the design team. In startup world there is of course no room for such luxury. The resources are very limited and the roles can't be carved in stone.

Sarvas also stresses that service design as an approach does not focus on the business viability of the new service. It can fall in the same pit as user-centric design; focusing on users holds within the assumption that there are people already using the service. What about all the potential customers who have no clue that such a service exists? Lean Startup focuses much more on acquiring users than optimizing the user experience, and from a business perspective it is more important to get users than to plan the experience for existing users.

Sarvas sees that one of the best contributions of Lean startup is the emphasis on continuous learning since learning is elementary for all change. Sarvas also highlights the Lean startup's focus on validating hypotheses. As Eric Ries has said, even smart people tend to fool themselves. When you make hypotheses and write them down and then go out to validate them with real customers fooling yourself becomes impossible.

4.4.3 Lean startup and design thinking

There are not many academic sources which analyse the differences between Lean Startup and service design. In fact the only paper seems to be by Mueller & Thoring (2012) in which they are comparing Lean startup and design thinking - not Lean startup and service design. Their method is based on literary review which led to a discovery that the two communities, lean startup and design thinking do not seem to interact or cite each other very often. Methods and tools the communities use are quite similar but are called with different names. Mueller & Thoring see that there is a great potential for both communities to learn from each other's strategy. (Mueller & Thoring 2012, 2.) They even suggest that the two methodologies should be merged in to concept called "lean design thinking" (Mueller & Thoring 2012, 9).

From the point of view of this thesis, it is not that relevant to compare the process of Lean startup and design thinking. There is however few interesting notions to be highlighted. Regarding the innovation process, the lean learning cycle of build-measure-learn can be applied to different levels of a project. It covers the whole process but can also be used on a micro-level to very specific design decisions and details. So the learning cycle allows to zoom into sub-processes whilst design thinking processes are applicable only to the entire problem. (Mueller & Thoring 2012, 4.)

Another important view is the starting point of the innovation process. In Lean startup there is normally right from the beginning some business idea or a vision for a new service. In design thinking the user problem is not preconceived and the process starts with extensive research before idea generation. (Mueller & Thoring 2012, 7.) Mueller & Thoring (2012,9) in fact suggest that if someone already has a business idea she wants to launch to the market, then lean startup might be the right approach whilst if someone is only looking for potential business ideas, design thinking would be the better strategy.

Mueller & Thoring (2012, 6) compare design thinking and Lean startup on altogether 16 factors which are presented in the Table 4.

What	Design thinking	Lean Startup
Goal	Innovations	Innovations
Scope, Focus	General innovations	High-tech innovations for Startups
Approach	User-centered	Customer-oriented
Uncertainty	Solve wicked problems	Unclear customer problem
Testing	Fail early to succeed sooner	Pivoting is at the heart of the 'fail fast' concept. The sooner you realize a hypothesis is wrong, the faster you can update it and retest it.
Iteration	Yes ("Iteration")	Yes ("Pivoting")
Ideation	Ideation is part of the process, solutions are generated in the process	Ideation is not part of the process, product vision is initially provided by company founders
Qualitative Methods	Strong focus: elaborated ethnographic methods, user research, observations, etc.	Not a focus
Quantitative Methods	Not a focus	Strong focus: metric-based analysis; provides matrices, and testing
Business Model	Not a focus	Focus
Adaption of deployments	Not a focus	Five Whys Method
Typical Methods	Shadowing, Qualitative Interview, Paper Prototyping, Brainstorming (with specific rules), Synthesis, etc.	Qualitative Interview, Smoke Test, Paper Prototyping, Innovative Accounting, Split (A/B) Tests, Cohort Analysis, Funnel Metrics, Business Model Canvas, Five Whys, etc.
Hypothesis Testing	Not a focus	Focus
Prototype Testing	Yes	Yes
Rapid iteration	Yes	Yes
Target Group	Users (usually end users, sometimes other stakeholders)	Customers (distinguished between Users, Influencers, Recommenders, Economic Buyers, Decision Makers)

Table 4: Comparing design thinking and Lean Startup as innovation methodologies (Mueller & Thoring 2012, 6)

5 Design process for the personal learning concept

This chapter discusses the empirical part of the thesis: the development project conducted for the case company Markkinointi-instituutti. The design process for the service concept is presented and how methods and/or tools were used is explained. The outcomes and findings are also described.

Since the service concept was designed as team work it is in order to clarify which part of the work was conducted by myself, the author of this thesis, and which parts were done with my colleague Kirsi Hanhisalo or rest of the case company project team. This Figure 12 illustrates the process and demonstrates how work was divided.

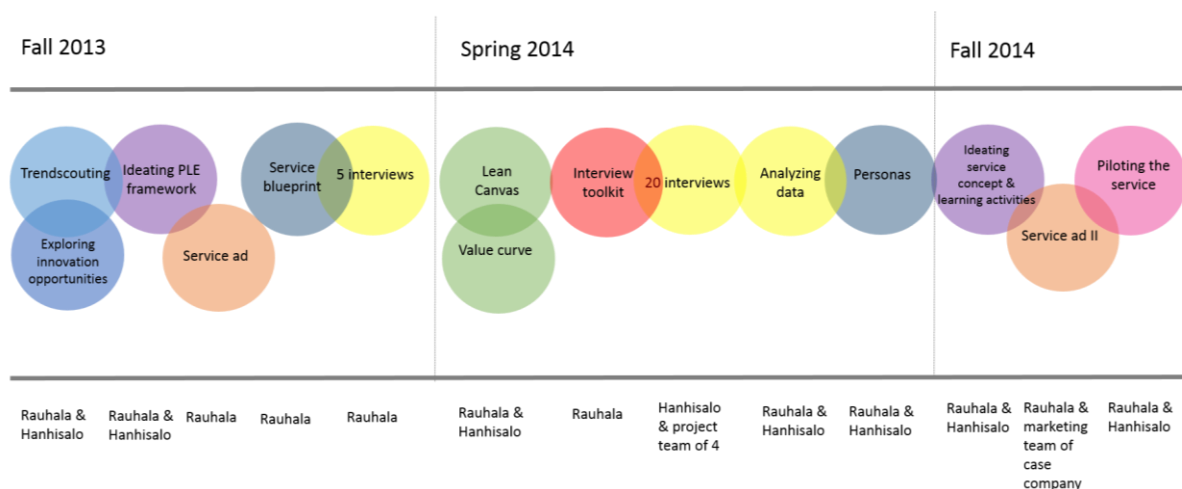


Figure 12: The phases of the design process and how work was divided

5.1 The overall design process and methods

In training services it is very typical to jump right into the learning goals and outcomes and then start planning what kind knowledge and skills are needed and how they would be best learned during the training program. The overall service experience might not be on the agenda at all. Still it is common knowledge that the core of the training service concept is by no means the only thing facilitating customer's value creation. Often the peripherals might turn out to create even more long term value such as the possibility to network and meet colleagues from different companies and exchange experiences and get peer support. The value can emerge in customer's life a long time after the service experience.

In this project service design methods were used in order to have a more holistic view on customers and thus create them better service experiences. On the other hand, there was a need to create new business so the business viability dimension had to be present all the time. Even though there had been customer insights and trend scouting before the initial service idea started to form, the real starting point for the development project was a strong hunch that there was a growing customer need for the service in question. Due to these factors, Lean startup tools were seen to be very useful too.

Each service design project is different with different goals and therefore there is no one specific right way of using service design methods and tools. Work is done iteratively and methods often have to be adjusted, improved or even modified. The first step of service design process should be the design of the process itself. (Stickdorn, 2010.) The design process was planned based on the initial ideas on innovation opportunities, business goals, previous customer insights, resources and the timeframe available. The aim was to create a service con-

cept which helps customers create themselves a personal learning network to support their personal learning and career goals.

The overall process follows loosely the Double diamond design process which has four phases:

- Discover: initial idea/inspiration often sourced from a discovery phase in which user needs are identified
- Define: interpretation and alignment of these needs to business objectives
- Develop: design-led solutions developed, iterated and tested
- Deliver: resulting product or service is finalized and launched in the relevant market

The Double diamond design process model was developed by the Design Council in 2005. It is graphically based on a diagram looking like a double diamond which describes the divergent and convergent stages of the design process as shown in the Figure 13. The figure also shows which tools and methods were used in which part of the design process of this thesis. Double diamond is also called 4 D model since each name of the different phases starts with a D: Discover, Define, Develop and Deliver. (Tschimmel 2012, 9.)

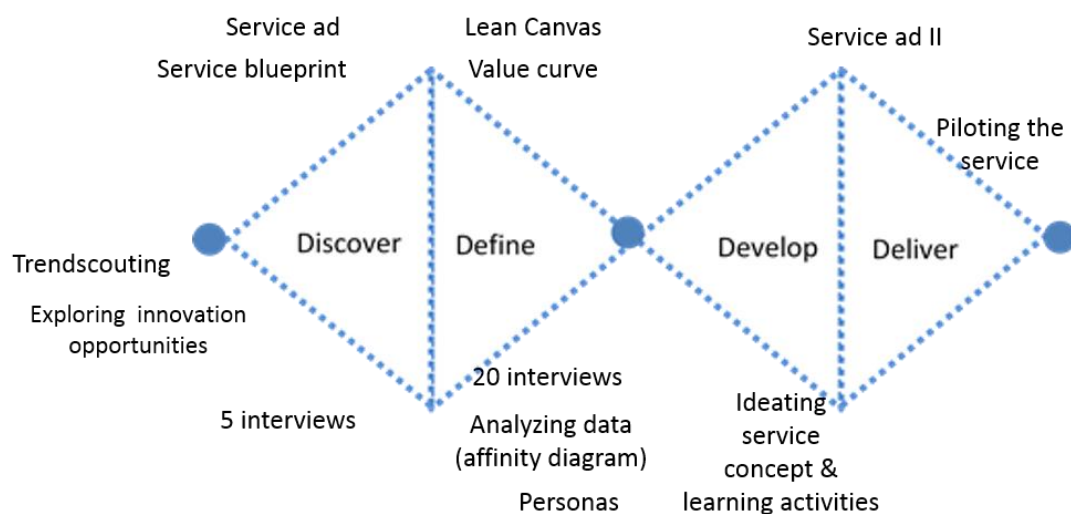


Figure 13: The Double Diamond model of design process and phases of the development project of this thesis (Design Council)

It is very important to notice that the process was iterative. Different tools were experimented according to which seemed to serve and help in that particular phase of the process best. For example a strategy profile was drafted quite early in the process in order to position the service idea better and to compare it with other competing service offerings.

Right from the start of the development project a goal was set to pilot the service with external customers and case company employees. The real, yet experimental pilot was considered to be an ideal way to co-design the service. At the same time the pilot would serve as a Lean startup style minimum viable product. The idea was that customers participating the pilot would have to be so interested they are willing to pay something for it. The pilot would also be a way to validate if interest in the service would translate into a viable business.

5.2 Discovery: finding the customer problem and setting the initial hypotheses

Where and how do you start finding innovation opportunities? According to Kumar (2013, 17-19) there are different mindsets related to sensing an intent: Sensing Changing Conditions, Seeing Overviews, Foreseeing Trends, Reframing Problems and Forming an Intent. In designing this service concept the discovery-phase made use of all these fore mentioned mindsets.

5.2.1 Starting from the learner

Initially there was a lot of existing customer insight due to the almost daily encounters with case company customers. The trends related to working life and education have also been monitored actively and regularly. Based on these views innovation opportunities around informal learning and personal learning environments were explored. Could a new service be designed which would help customers accelerate their informal personal learning in working life?

The internet is filled with excellent digital tools, relevant learning resources and professional communities but the customers don't know these opportunities or can't make use of them. Maybe there is a need for a service which would facilitate a customer in creating herself a value and resource constellation which promotes her informal, personal learning. This thinking corresponds well with the service logic perspective on innovation. As Michel et al. (2008, 50) state companies should innovate the customer's role to create value and alter how they integrate value and reconfigure their value networks and innovation also comes from reconfiguring the value constellation of a customer.

5.2.2 Mock up Service ad

Service design uses many visualization tools for different purposes. There are techniques such as tomorrow's headlines and service posters. They are fictional articles or advertising images of the service which have two benefits. On the other hand they force the designers to ask themselves how the service will be communicated to the customers. The images also allow designers to share their thoughts with other stakeholders. (Diana et al. 2009, 7.)

A fictional service ad was drafted in a very early stage of the design process. Figure 14 illustrates the ad. The goal was to make the still quite elusive service idea more concrete and to communicate it within the case company.

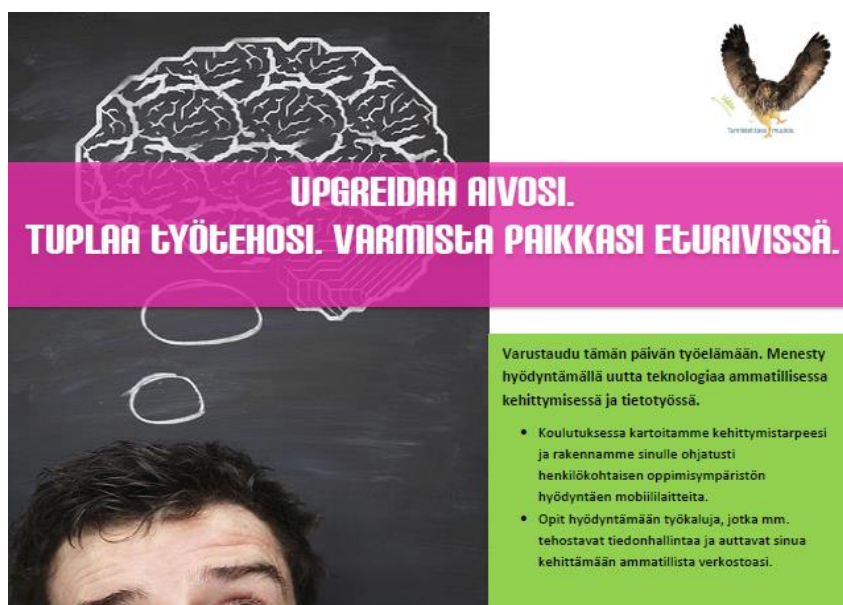


Figure 14: First draft of the mock up service ad

To be honest the first draft of the mock up service ad was not very useful. Based on stakeholder feedback it did not help in communicating the value proposition and benefits of the service.

The tool was not totally useless though because it turned out to be helpful for the project team in crystallizing the benefits of the service idea. It also helped in discovering the need to find customer-friendly terminology and not use the specialists jargon about PLEs, PLNs and of informal learning.

5.2.3 Service blueprint for getting new ideas and identifying value creation opportunities

Service blueprinting is a well-known technique which helps in describing the service process through a step by step interaction between the customer, the service staff and the backstage (Diana et al. 2009, 5-6). Typically a service blueprint has five components: Customer actions, Onstage/visible contact employee actions, Backstage/invisible contact employee actions,

Support processes and Physical evidence as illustrated in the Figure 15 (Bitner et al 2008, 72-73).

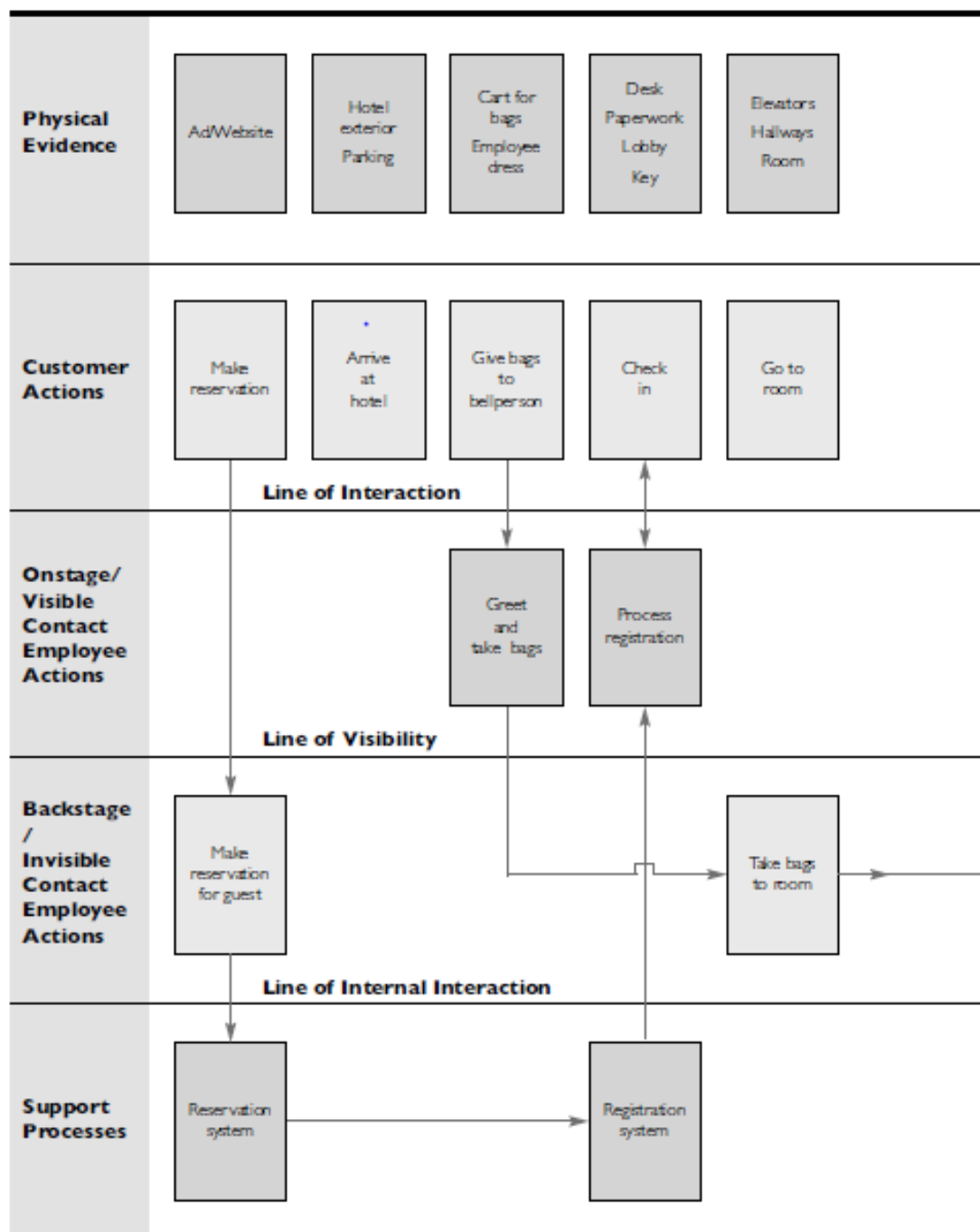


Figure 15: Service blueprint for overnight hotel stay (Bitner et. al 2008, 76)

According to Bitner et al. (2008, 67-68) service blueprinting is effective, adaptable technique and is strongly customer focused. It can be used for service innovation, improving quality of the service, designing the customer experience design, and drive strategic change focused around customers. The technique is often used in designing new services since service blue-printing results in a visual rendering of the service process and also describes the underlying

organizational structure being therefore very useful in the concept development stage of service development. (Bitner et al. 2008, 70.)

In this design process the service blueprint technique was used for finding new ideas and discovering possibilities based on an existing service. There was a need to understand the process for case company's individual customers more profoundly - not to visualize the service concept. A service blueprint focused on one specific part of the process: signing up as an individual customer for some of the courses or training programs of the case company. The blueprint illustrated in the Figure 16 showed that there are many important touch points already in this part of the customer's process. For example customer service chat has to be prepared to answer potential customer questions. The blueprint also provided ideas what the customer and service provider could do in the pre-service phase in order to prepare for the actual learning service.



Figure 16: Service blueprint of the signing up process

5.2.4 Research through contextual interviews

Service design places emphasis on qualitative research methods which are drawn from user- and human centered design traditions but also from the social sciences. Goal is to gather insights into the needs, desires, experiences and motivations of people using and providing the designed services. (Polaine 2013, 38.)

Like Polaine et al. (2013, 40) conclude insights generated through qualitative research help designers to understand the chaos and emotions that are characteristic for us humans; designers are interested in people's needs, behaviors and motivations. Insights should provide a holistic understanding of the customer but also give knowledge about business requirements, constraints, market opportunities and risks.

It is fair to say that research philosophy was a mixture of both service design and Lean startup approach. There was a vague service idea, some good guesses and hypotheses based on existing customer insight and current trends, but the guesses and hypotheses had to be validated.

The hypotheses were that customers are feeling a sense of stress and a maybe even feeling of not being in control. They are to some extent aware of the digital possibilities and services that could be used for personal learning and also building their personal professional brand but are lacking time and sometimes skills in order to seize the potential.

Five interviews were conducted during November 2013. Four of the interviews were done in site and one via Skype. The second phase of interviews were conducted during the spring of 2014. The second phase consisted of 20 interviews. This phase of the project is explained in detail later.

Goal was to recruit interviewees among people who do knowledge intensive specialist work and for whom continuous personal learning is especially important. This was an easy task since Markkinointi-insituutti has a large individual customer base who usually are satisfied and willing to recommend the services to others as well. All the interviewees were case company customers or previous customers so it was obvious they valued educating themselves and updating their skills.

There was four goals for the first interviews:

1. **Define the customer problems was the most important research goal.** It was vital to get more first-hand information how the customers experience their work life and how do they currently develop themselves on a daily bases in their jobs and are there any problems related to this. The problems should be so present in customer's lives that they or better yet their employers are willing to pay in order to get them solved.
2. **Get insights about possible customer segments.** Are there any patters appearing? Do some customer groups find the service idea more attracting than others? It's not possible to find the right market or draw very profound conclusions about customer pro-

files with such a small group of interviewees but hopefully they would give guidelines for the next steps.

3. **Find the right terminology** It is easy to slip into using professional terminology which is not familiar to potential customers. It was important to discover how the interviewees perceived the terminology and even more importantly what were their ideas about right wordings. What would be understandable and appealing to them?
4. **If possible find some early adapters who are willing to co-innovate and co-design the service.** According to Lean Startup approach you should focus on finding early adapters to innovate the service with. The aim was to find at least 1 or 2 people who would be willing to participate somehow during the next phases of the project.

Interviewing technique was contextual interview. Curedale (2013, 176) states about this method that usually the researcher just listens and does not impose tasks. There were one task related to the interview but mostly it was about asking an open ended question and listening. Interviews were conducted as on site visits even if they were more time consuming then doing the interviews on phone or via conference call such as Skype. As Portigal (2013, 3) states, interviews should be always done in the real context if possible. Four of the five interviews were conducted on the physical surroundings where the interviewees actually work in order to get more in touch with their everyday working life. This was the ethnographic approach of the research.

The interviews were recorded with an audio recorder and some pictures were taken from the site. Figure 17 is one example.

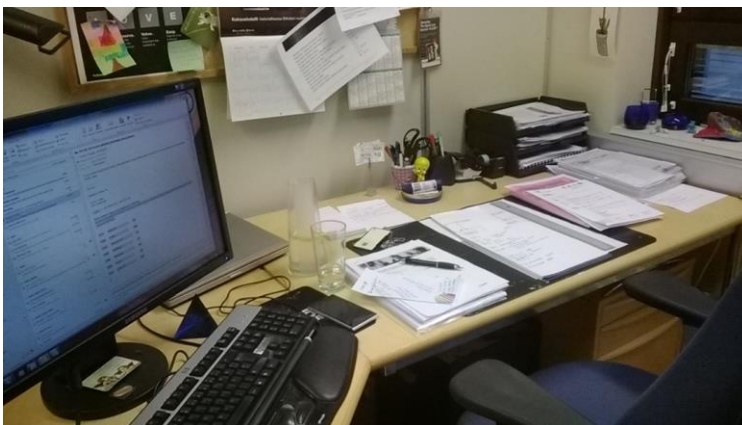


Figure 17: A picture taken from the workplace of one the interviewees

The interview had more four main themes and some loosely formulated questions related to that theme. The themes and questions were:

1. Work: how is the daily work life of the interviewee like and how do they manage it, do they work remote, how is the balance with work and personal life?
2. Personal learning in working life: how does the interviewee take care of her professional development, what services does she use, are there any obstacles for continuous learning?
3. Technical devices: what technical devices does the interviewee use and for what purposes?
4. Terminology: how does the interviewee perceive the following terminology: metaskills, worklife skills, PLE personal learning environment, PLN personal learning network, non-formal learning, MOOC)?

In the end of the interview the image of the personal learning frameworks was presented for the interviewee and the service idea was explained. The idea was to get spontaneous reactions and hopefully find some early adapters especially interested in the service idea.

Finally the interviewees were asked to draw a mind map of their personal learning environment (PLE). For example what networks, people, tools and learning resources would they include into their PLE.

5.2.5 Key findings from the first interviews

The key findings were that the customers were experiencing the assumed problems. Almost everyone stated that they were expressing some amount of stress in their work and had the sensation that they didn't have time for developing their professional skills on the job. The calendar was filling of acute and ad hoc assignments. In an environment like this the customer problem is that they should make room for something else like professional learning and they are unable to do that.

One hypothesis was that people felt they were not doing all the things they kind of felt they were pressured to do such as having their professional learning network and their own digital footprint and personal brand in order. This was the case with people who felt some dissatisfaction in their work. People, who seemed happy, said that they had decided not to focus on that and spend any time and effort on it. The problem was not so acute that they were likely to pay for solving that.

This finding indicated that the potential early adapter might be the people who don't feel that content about their current jobs and that there should be room for choice. Customers

seemed to embrace the possibility to elect the kind of elements that would be relevant for their individual professional situation and the personal need to develop at that particular moment.

The findings of the first interviews also led to think that if the ambitious PLE framework had to be narrowed down, the dimension including professional networks and personal professional brand would be most interesting for customers. Thus it would be the most potential area from where to start.

Interestingly most of the interviewees wanted to draw a strict line between work and free time especially when they had small kids. The idea of learning professionally relevant things on their free time seemed too much to ask. After the kids are finally put to bed, they would rather hang out in Facebook or read interior decoration magazines or fashion blogs instead of checking professionally interesting Twitter feeds - if they were to spend their evenings online at all. Many stated that after staring so much the screen during work day they don't want to do that anymore on their free time. This gives some guidelines in designing the service and especially in targeting it to people with small children.

There were things that were problematic in the interviews. It was challenging to stay neutral while having an ownership to the service idea even if the interviewees didn't know that. Maybe it would have been better to use someone not having an emotional connection with the project. But on the other hand it's a two way street. Like Portigal (2013) says, interviewing and meeting the people helps build empathy and for good design empathy is crucial. Meeting the potential customers and getting to know their world first hand is important too.

After the first interviews the service idea seemed to have potential. Ideas for many potential customer groups surfaced but at the same time it was clear that it would be impossible to try to chase them all at once. A decision was made to focus just on one or two customer groups and pilot and co-create the service concept with them. Against this backdrop it was important to find potential early adapters and plan what kind of insights and validations were still needed to move on with the service idea.

5.3 Define: validating the customer problem and defining the solution

5.3.1 Lean Canvas

Simultaneously with the qualitative research the service concept was roughly outlined using the Lean canvas. Maurya says in his teaching material *How to Create your Lean Canvas* that Lean canvas is a perfect tool for brainstorming possible business models, prioritizing where to

start, and tracking ongoing learning. Lean canvas is an adaptation of the Business model canvas by Alexander Osterwalder and Yves Pigneur (2009). Each customer segment needs a separate canvas and Maurya advises to start from the customers and their problems since the “Problem-Customer” pair usually drives the rest of the canvas. The next sections of the canvas should be filled in the order illustrated in the Figure 18.

Problem Top 3 problems 1	Solution Top 3 features 3 Key Metrics Key activities you measure 6	Unique Value Proposition Single, clear, compelling message that states why you are different and worth buying 2	Unfair Advantage Can't be easily copied or bought 7 Channels Path to customers 4	Customer Segments Target customers 1
Cost Structure Customer Acquisition Costs Distribution Costs Hosting People, etc. 5		Revenue Streams Revenue Model Life Time Value Revenue Gross Margin 5		

Figure 18: The Lean canvas and in which order to fill the sections (Maurya, accessed 27.3.2015)

It is quite possible to leave sections blank since Lean canvas is an organic document evolving over time. When sketching the canvas, one's should focus to the present: based on the current stage and knowledge, what are the next set of hypotheses that need to be tested to move on with the product. (Maurya 2010.)

In the design process for the personal learning service, Lean canvas was at that moment considered to be more useful than the original business model canvas since the customer problems and customer segments needed to be validated first. The first draft of Lean Canvas was sketched on November 2013 and it had the initial ideas presented in the Figure 19. The name of the service idea changed after this first draft.

Due to the resource constraints it was important to identify the so called early adapters, customers who would benefit from the service the most and who would also be willing to take part in the service pilot. Lean canvas was a useful tool in setting hypotheses and a having a more clear focus.

LEAN CANVAS: "BUILD YOU PLE WITH PLT –BOOTCAMP"

<h2>Problems</h2> <ul style="list-style-type: none">• Pressure for constant professional development but hard to find time for that without• Resources and tools not familiar – cost of missed opportunity• Workflow not continuous and optimized <p>Existing alternatives:</p> <ul style="list-style-type: none">• Learning diaries• Self build “PLEs”	<h2>Solution</h2> <ul style="list-style-type: none">• Informal learning accelerated and optimized• Personal & individual• Portable and mobile, take it with you everywhere! <h2>Key Metrics</h2> <ul style="list-style-type: none">• 50 new customers the first year generating ~50 000 revenue• Network of 500 interested and potential customers	<h2>Unique Value Proposition</h2> <ul style="list-style-type: none">• Get your “Personal learning trainer”. Why invest just to your body when your mind needs constant workout too?• Harness your full potential. Learn skills, tools and habits that make you a lean, agile learner.• Be ready for constant change. Have a sense of managing your professional development.	<h2>Unfair Advantage</h2> <ul style="list-style-type: none">• Having a ready customer base & customer insight• Building a network no-one can steal (co-creation) <h2>Channels</h2> <ul style="list-style-type: none">• Existing customer base at MI• Blog & events• Partners?	<h2>Customer Segments</h2> <ul style="list-style-type: none">• Adults working in knowledge intensive jobs requiring expertise and constant professional development and learning• Potential early adapters: job changers and “what do I want from life next” people who appreciate professional development
<h2>Cost Structure</h2> <ul style="list-style-type: none">• On going people cost: 100 hrs x 65 € = 6500 €• Facilities + general cost: 8000 € <p>Break-even point: 14 500 € / PLE service</p>		<h2>Revenue Streams</h2> <ul style="list-style-type: none">• Service fees 1000 €/customer• Expected 25 customers / PLE service		

Figure 19: First draft of the Lean Canvas for the service concept

The next version of the Lean Canvas is left out of the thesis report since it is considered containing delicate information.

5.3.2 Blue Ocean strategy profile

When developing a new service, positioning it in the customers mind is important. Commercialization should be on the agenda right from the start. In this design process a blue ocean strategy profile was used as a tool positioning the service. Strategy profile is a tool for visualizing strategies. It was presented in the famous management book *Blue ocean strategy* by Kim & Mauborge (2005).

Many of the project team members work in close contact with the customers and follow the training industry and competition closely. Based on this knowledge and the customer insights

from the first interviews, six factors of competition and three competing learning services were chosen as illustrated in the Figure 20.

In an ideal situation, the focus would have been even more strongly on the customers by discovering first what do they perceive as competing services and do they really perceive the chosen value factors. Due to the resource constraints this was not possible. Still the strategy profile proved out to be a great tool for visualizing how the service idea was planned to facilitate value compared to other learning or training services.

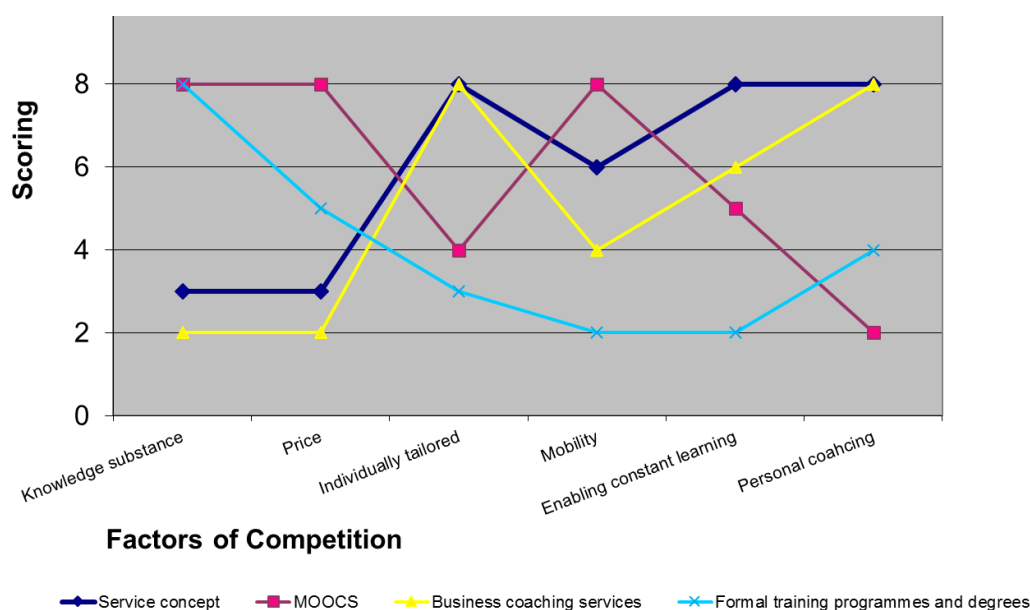


Figure 20: Blue ocean strategy profile for the service idea

5.4 Second set of Interviews

The first set of interviews during November 2013 gave lot of knowledge and provided relevant findings. It also gave good guidelines for the second set of interviews.

During the second interviews the goal was again to interview primarily people who do knowledge intensive specialist work and for whom continuous personal learning is especially important. Altogether 20 interviews were conducted during the spring of 2014 by four members of the case company project team.

An interview toolkit was prepared which included the goals for the interviews and aim for the research, instructions and interview questions. The interviewees were recruited among case company customers and network of people conducting the interviews.

5.4.1 Affinity diagramming

After the second interview phase it was time to gather all the data and insights and make sense of it. Affinity diagramming is a process for externalizing and clustering meaningfully insights from research and keeping designers grounded in data when designing. Affinity diagramming is an inductive process. Insights are not grouped in predefined categories. They are clustered bottom up. (Hanington & Marting 2012, 19.)

Clustering insights is a way to analyze the research data. All the insight statements are written down to sticky notes in few phrases and then the insights are sorted. Analyzing the clustering patterns gives a better understanding of the topic and provides a foundation for generating concepts. (Kumar 2013, 141).

Analysis was completed by reading through the notes from all the interviews, first and second phase and writing down to sticky notes everything that seemed at all relevant. After the data was on sticky notes as insight statements they were clustered for identifying patterns as shown in the Figure 21.

After few hours of work there were nine topics which were given these titles: 1) Digital world and me, 2) Work, 3) Hurry, 4) Stress, 5) Life outside work, 6) Support, 7) Network, 8) The service concept and 9) Learning.



Figure 21: Clustering insights

The next step was to make the clustered insights actionable and make sure they are taken into account in the design process.

5.4.2 Creating Personas

According to Goodwin (2009, 229) personas are archetypes which describe the goals and observed behaviors of potential users and customers. They encapsulate and explain the most critical behavioral data in an engaging way so that designers and other stakeholders can more easily understand, remember and relate to it. Dijk et al. explain (2010) that persona is a fictional profile representing a particular group that is developed based on the insights gathered during the research phase. Character is fictional, but the features and motivations are real and data driven.

Personas are meant to be emotionally and socially engaging and they should be considered as storytelling devices. Persona is usually given a name and is somehow visualized. Persona has sets of goals and a narrative which often describes her mental models, attitudes, environment, skills and frustrations or any other information that is critical for understanding the behavioral patterns. Goodwin (2009, 229) believes that storytelling is a more engaging way to use persona than just listing bullet points.

Goodwin (2009, 231-232) also argues that personas are useful tools in designing all services and products which will be experienced or used by humans. Personas can be useful in variety of activities such as defining and designing the product/service, communicating with the stakeholders, building consensus, motivating and rallying a design team around a shared goal, marketing the product/service, developing documentation and even prioritizing bug fixes in a digital service. Personas should be regarded mostly being for product/service definition and design tools but their role can evolve during the design process. In the early stage of the project personas help in envisioning what users need most from the product/service. On a later stage personas are useful in generating ideas and iterating solutions. Designers should make decisions with a shared image of the user in mind. Personas should influence all the aspects of the design but they can also help in making technical or business decisions. (Goodwin 2009, 231-232).

Why do personas work? Goodwin explains (2009, 234-235) that they help us relate to users in a more human way when they are not presented as abstract ideas but as humans. Personas are easy to empathize with. Our minds are engaged in unique ways by other humans. We as people are also especially keen on creating models and archetypes in order to make sense of our environment.

In this design process, personas turned out to be a great way to make the insights engaging, actionable and easy to communicate. This became clear as the findings were presented for the case company audience which gave positive feedback. The customers really came alive with the personas and short narratives about their lives and professional development as the Figure 22 demonstrates. The other persona is attached in the end of this thesis as Appendix 1.

”

Haluan jonkun sparraamaan! Erityisesti henkilöbrändi kiinnostaa monestakin syystä, mutta miten pääsen alkuun?!



**Kaisa 43 v.,
viestintäpäällikkö**

Harrastukset, elämäntilanne

3 kouluikäisen lapsen äiti, jolla riittää kiirettä. Bonuksena kuohuva murrosikäinen, joka aiheuttaa päänvaivaa. Vapaa-aika kuluu lasten harrastusrumbassa. Koettaa liikkuu itse minkä ehtii ja pystyy. Harrastaa sisustamista. Estetiikka ja kauniit asiat on sydäntä lähellä. Lukee sisustusblogeja iPadilla. Yrittää nipistää omaa aikaa omille jutuilleen. Koti on ikuisuusprojekti, joka tuo toisaalta iloa ja tyydytystä elämään. Tekee etätöitä muutaman kerran viikossa. Ei käytä mobiililaitteita ammatilliseen kehittymiseen vaan surffailuun ja sähköposteihin.

Huolenaiheet, turhautumiset

Kaisa on insinööriavetoisessa pk-yrityksessä ainoa viestinnän ja markkinoinnin osaaja. Kokee olevansa ammatillisesti yksin ja aliarvostettu. Kaipaa kipeästi sparraajaa. Digimaailma ei ole niin hallussa kuin pitäisi olla. Oma verkkobrändi arveluttaa. Pitäisi tietää ja osata, mutta miten alkuun? Hienoinen epävarmuus työtilanteesta vaivaa. Vasta oli isot yt:t ja koko muu tiimi sai lähteä. Ehkä pitäisi miettiä kokonaan toista työpaikkaa? Siinä verkkobrändistä olisi hyötyä. Kokee nollaamisen ja relaamisen vaikeaksi.

Tavoitteet, pyrkimykset, motivaatio

Kaisa haluaa antaa itsestään ammatillisesti pätevän ja osaavan kuvan myös verkossa. Hän haluaa rakentaa vahvempia ammatillisia verkostoja ja saada sparrausta. Haluaa saada balanssin elämään ja oppia hallitsemaan työn ja vapaa-ajan sekoittumista. On kiinnostunut kehittämään itseään ja työtäänkin, jos saisi kannustusta. Haluaa uusia ideoita ja freesiä ajattelua. Haluaisi osata perustella merkitystään yrityksen johdolle, hänen työnsä on merkittävää yrityksen menestyksen kannalta.

Figure 22: “Kaisa”, other one of the two personas based on insights

5.5 Develop: Ideating the Service concept

When designing a learning service there are many factors to consider. There are naturally learning goals and methods to be planned, but the overall experience should also be considered.

In this process it was a conscious decision not to over plan in advance the learning content and activities since the whole idea of piloting the service was to discover the best choices with the customers according to their needs. The pilot would serve as a co-creation platform where the service could be co-designed.

5.5.1 Brainstorming the pilot service

With two brainstorming sessions, the essential elements for the pilot were identified which are illustrated in the Figure 23. Potential solutions were ideated accordingly.

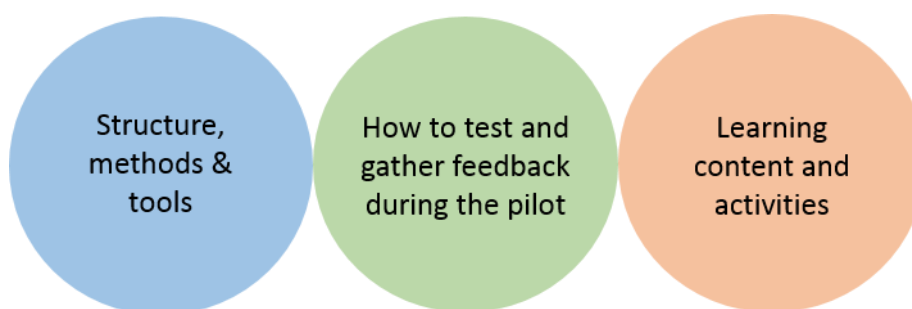


Figure 23: Three elements for the service pilot

It was decided that the pilot would consist of four half day face to face sessions and different ways of holding the individual coaching sessions would be tested out. A metaphor from physical training was chosen and it gave shared language for the pilot. Just like personal trainers tailor individual training programs according to person's health and fitness goals and starting level, the service should work according to same principles.

It is not relevant to describe the learning content and activities in this thesis in detail. What is relevant however is the fact that all the content and activities should be designed so that it is possible to address different kind of needs. It was also decided that the weekly time a person would be investing could not be over 2 hours.

The methods and ways to gather feedback and document all new ideas how to improve the learning experience and impact were also ideated. An online survey would be used but only after the first kick off session to get some quick feedback. Quantitative survey was not seen as an ideal way to gather feedback since the pilot would give an excellent possibility to get more in depth feedback and insights through informal interviews. Short, informal discussions with both external customers and case company employees were considered to be the most important and most effective way to learn and develop the service. It was also decided that a learning journal would be kept to keep track of all the ideas and findings throughout the pilot.

5.5.2 Recruiting the pilot group

The first mock up service ad was created in the discovery phase in order to concretize and communicate the back then fuzzy ideas and benefits of the service. This time the goals were different. The second service ad was for recruiting pilot customers and communicating them how the pilot was scheduled. This ad was almost a real thing since it was designed according to case company visual brand guidelines.

The pilot group had altogether 10 members. There were six case company employees and four external customers who represented potential customer groups. One of the customers participating the pilot was interviewee in the first set of contextual interviews from fall 2013 which demonstrates that the goal to find early adopters was met.

According to Lean startup philosophy you need to get validation for your hypotheses. The strongest validation is that a customer is willing to pay. Therefore external customers did pay a small fee for taking part in to the pilot. It was also considered to be a way to engage participants and ensure their commitment.

5.6 Deliver: Piloting the service and summarizing the learnings

The service pilot run for almost two and a half months and it had multiple touch points from emails and learning management system to coaching and training sessions.

There was a kick off and a closing seminar, two learning sessions and altogether four coaching sessions conducted either face to face or via video conferencing and instant messaging service such as Lync or Skype. During the kick off session, the goal to co-design, testing and trying out different tools was communicated.

Structure of the pilot is illustrated roughly in the Figure 24.

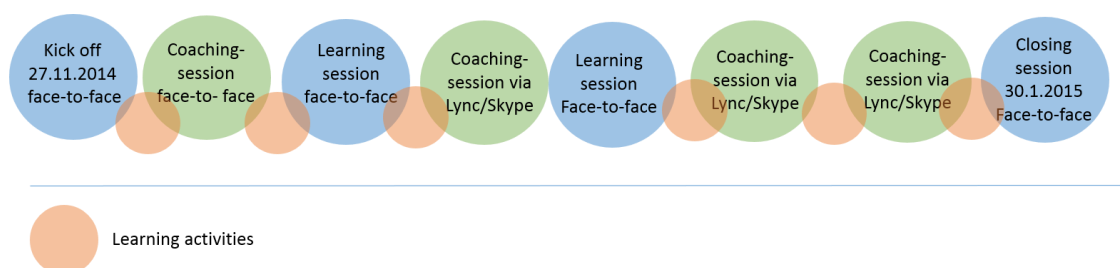


Figure 24: Structure of the service pilot

5.6.1 Co-designing the service through the pilot

Pilot development and testing is a way to test innovation solutions in their real context where they function as real offerings. Piloting requires same kind of planning as launching the actual service, only the scale is different. (Kumar 2012, 305).

In this design process piloting was also a way to develop and co-design the service. The pilot turned out to be an ideal way to co-design a service with the customers and other important stakeholders, case company employees. All participants were asked to actively state their learning needs and what they wanted to achieve and the learning content and activities were designed accordingly. It was especially easy to leave something out and create new content depending the customer needs since the pilot gave the chance to experiment together. Everything didn't have to be so well planned and put together in advance. The pilot provided the possibility to test different kind of learning content and activities, tools and approaches to achieve the best learning results, customer experience and benefits. Also having real, paying customers in the pilot pushed to create better solutions and forced to keep up with the deadlines. Working like this can be seen to have some similarities with agile development.

5.6.2 Gathering insights during the pilot and summarizing the learnings with customer experience journey

Pilot testing usually includes measuring market acceptance, getting customer feedback and observing engagement with the offering (Kumar 2012, 305). During this pilot, a learning journal was kept throughout the pilot by the project team to keep notes and collect ideas and thoughts. Customers taking part of the pilot were interviewed during the pilot and so were few of the case company employees as well. There was also an electronic survey after kick off day to get feedback on customer reactions.

The service pilot was a wonderful learning journey for all the stakeholders. It provided deep insights and helped in discovering what was really relevant for customers. It generated a huge amount of ideas how to improve the service experience and enhance learning so that it would result in improved ways of using digital tools. In fact there were so many findings, learnings and ideas that it became essential to put them in a format which would make them actionable. Customer experience journey was chosen as a tool for summarizing the key findings.

Service design uses many tools for visualizing the service journey. Mapping the experience enables holistic understanding of interaction with the service or the organization from the perspective of the customer (Kimbell 2014, 86). A customer journey map provides a structured yet vivid visualization of a user's service experience. The tool is engaging and details the service interactions and experiences in accessible manner. First the touch points are identified. Touch points can be virtual interactions, face to face encounters or physical trips. Then the touch points are connected together in a visual representation of the overall experience. (Van Dijk et al. 2010.)

It would have been impossible to include all the touch points and still have a holistic view on the service hence the most critical touch points for the customer experience were chosen to be illustrated in the customer experience map. The customer experience map is attached in the end of this thesis as Appendix 2.

The customer experience map summarizes both positive and negative experiences based on customer feedback and insights gathered during the service pilot. Direct quotes from the customers are included to ensure their voice gets heard. Also customer feedback is very engaging, convincing and powerful. The customer experience map is intended to be a tool when developing the service in the future and therefor it also has a section where an ideal experience is described to make sure the most important findings will be taken into account.

As said earlier it is easy to forget the overall experience and just focus on learning goals, content and methods. The experience journey map also helps in focusing to the overall experience.

5.6.3 Service concept

According to Bettencourt (2011, 190-191) service concept is description of the service and how it is satisfying customer needs. Concept should specify what service is providing for customers and how service delivery system is designed to provide both customer and business value. The differentiating features should be highlighted and connections between service processes and features and what outcomes customers are trying to accomplish should be clear.

As it was stated in the introduction of this thesis service concept is defined in this thesis according to the Tekes Vocabulary of Service Business (2012) and it can be more or less detailed according to the purpose for which it is used.

Table 5 describes the concept by using an adapted version of a Service Concept Worksheet Template by Bettencourt (2011, 191). Some of the details are left out and service concept is described here in a more general level.

Concept name: “Verkkovaikuttamisen valmennus”
Concept description: Constant, informal learning is a must in today’s rapidly changing conditions. In fact it constitutes around 90 % of all professional, work related learning. This service is targeted to knowledge workers. It enables and improves their personal informal learning in working life

by helping them to create a personal learning network and making use of free digital tools available. This is done by addressing the individual needs and goals of the customer by using learning methods such as coaching.	
Concept features: Service helps the customer to identify their individual professional strengths and professional networks by using easy to use tools and create personal goal how to improve. Service trains customers hands on to use digital tools and services to enable	Feature justifications: Customers want to feel in control of their life and have a sense balance. They want to make use of the digital tools and services and stay up to date but feel this is hard to accomplish with their busy working schedules. Therefor having personal support and planned learning program with deadlines is a must. Customers want to feel they are appreciated professionals who provide new ideas and improvements at their workplace but also are interested how their personal professional brand is seen outside the company. They want to have a digital footprint which not only benefits them but their employer. Customers want to feel connected with colleagues from different companies and have meaningful learning connections and want to discover new, more efficient ways to foster their professional networks.
Key design dimensions: Customer's individual learning needs, life and career situations are addressed by using coaching and other personal learning methods.	
Key service system characteristics: Service is based on using competence and knowledge of the case company employees. Technology has an important role by enabling the coaching sessions to be conducted efficiently and pleasantly without traveling.	

Table 5: Service concept described with Service concept worksheet template

Within the case company there are tools and information systems where new service offerings are described and they were also used for this service concept. However this documentation is left out from this report since the service concept designed is a real service launched to the market and some of the information is considered delicate.

6 Conclusions

This thesis was conducted as a development project for a case company Markkinointi-instituutti. The aim was to create a service concept which enables knowledge workers to create a personal learning network to enhance their personal learning in working life. Service concept was designed with service design and Lean startup tools which generated a sub re-

search question: how can Lean startup tools complement service design process, how do these two customer-centric innovation methodologies overlap and what are the biggest differences. Thesis also set out to discover if the service concept in question corresponds with customer-centric value creation paradigm of service logic.

The main theoretical framework of the thesis is customer-centric value creation and its implications on innovation. The empirical part of the thesis set out to prove that the chosen customer-centric innovation methods enable creating and piloting a service concept in question.

In the theoretical part of the thesis the context for the service concept was set out by introducing the underlining learning theories behind the service idea. These theories along with megatrends and views on skills needed in the future, justify the urgent need for building a personal learning network and environment for knowledge workers and why new innovative learning services are required.

Connectivism is a modern learning theory emphasizing the importance of technology, networks and new literacies. Learning is not only happening within the individual. On the contrary in today's digital and networked world we derive our competence from forming connections. The other important input from the educational sciences is the concept of learning environment which should be seen as an important part outcome of the learning process, not just a stage where learning takes place.

After creating a basic understanding of the context the main theoretical framework of the thesis was presented by introducing modern, customer-centric value creation theories: Service-dominant logic, Service logic and Customer-Dominant logic. Regarding the research problem the nuances between the logics are not that relevant. It is more important to evaluate what implications the shift in value creation paradigm has on innovation and how innovation should be seen from service logic perspective.

The thesis proves that service logic does indeed correspond well with the initial service idea since the service is explicitly facilitating customers in their own value creation processes by enabling them to make better use of all the resources available. Empiric part of the thesis also shows that service design and Lean startup are suitable methods in pursuing innovation from service logic perspective.

As it has been stressed throughout the thesis, learning services are by nature collaborative and there is a strong value co-creation aspect. Case company, Markkinointi-instituutti as a service provider has opportunities to co-create value with customers during countless interactions. At the same time learning services are often designed by focusing just on the

knowledge, skills and with which methods they are learned best and the overall service experience is forgotten. By using service design methods it was possible not only realize service logic but to ensure more desirable customer experience. Since the development project was aiming to create new business, Lean startup tools were helping especially in building the business model.

These two customer-centric innovation methodologies were discussed in some detail in order to make sense how do they can contribute in customer-centric innovation. The findings were that methodologies do differ. Lean startup focuses on validated learning and creating viable business whilst service design is more focused on understanding the customer, their context and using those insights in creating great service experiences. But as the empiric part of the thesis shows, it is beneficial to combine these different approaches, methods and tools in order to create solutions which are economically viable, technologically feasible and desirable to customers. Some practitioner views considering the difficulties in mixing service design and Lean startup tools turned out to be wrong at least in this case.

The service concept was piloted with external customers and case company employees which turned out to be a great way to create a new learning service in collaboration with the customers and other stakeholders. It can be argued that most interesting discovery and contribution of this thesis was the conclusion that the service pilot can be seen as a co-creation platform where value is co-created and the service is partly co-designed to match the customer needs in an ideal way.

What contributions can this thesis be seen to make? It can be argued that all case studies and academic papers which are bridging the gap between the academia and the practitioners and theory and practice are of great value. This thesis hopefully provides ideas and learnings that especially service developers in education and consulting industries can benefit from.

This thesis also calls out for new, innovative learning services. In the future it is vital that all educational institutions and training providers start to see learning differently and provide services to support that view. In the connected and digital world, it is not about knowledge anymore; it is also about relevant skills and how to form meaningful learning networks and create better personal learning environment and networks. The old saying “Knowledge is power” can be rephrased in many ways. One of the best new ways of putting it is “Access is power”.

It is certain that the speed of change is not going to slow down. On the contrary. In this rapidly changing environment indeed the only security will be in our constant ability to change and adapt.

References

- Ambrose, Susan A., Bridges, Michael W., DiPietro, Michele, Lovett, Marsha C. & Norman, Marie K. 2010. *How Learning Works, Seven Research-Based Principles for Smart Teaching*, Jossey-Bass A Wiley Imprint.
- Attwell, Graham 2007. *Personal Learning Environments - the future of eLearning?*, eLearningpapers, Vol 2, N°1 January 2007.
- Bettencourt, L. A. 2010, *Service innovation: how to go from customer needs to breakthrough services*, McGraw-Hill, New York.
- Bhalla, Gaurav 2011. *Collaboration and Co-Creation. New Platforms for Marketing and Innovation*, Springer.
- Blank, Steve 2003. *The Four Steps to the Epiphany: Successful Strategies for Products that Win*, Second edition 2013.
- Blank, Steve & Dorf, Bob 2012. *The Startup Owners Manual Vol.1. The Step-by-step Guide for Building a Great Company*, K and S Ranch Inc, K&S Ranch Publishing Division.
- Blank, S. 2013. *Why the Lean Startup Changes Everything*. Harvard Business Review, May 2013.
- Bitner, M., J., Ostrom A.L. & Morgan F.N. 2008. *Service Blueprnting: A Practical Technique for Service Innovation*, California Management Review, Vol. 50, No. 3, 66-94.
- Curedale, Robert A. 2013. *Service Design. 250 essential methods*. Topanga: Design Community College Inc.
- Cooper, B., & Vlaskovits, P. 2010. *The Entrepreneur's Guide to Customer Development: A cheat sheet to The Four Steps to the Epiphany*. s.l.: Cooper-Vlaskovits.
- Dawson, s & Siemens, G. 2014. *Analytics to Literacies: The Development of a Learning Analytics Framework for Multiliteracies Assessment*. The international review of research in open and distributed learning, Vol 15, No 4 (2014).
- Diana C., Pacenti E., Tassi R. 2009. *Visualtiles. Communication tools for (service) design*. First Notdic Conference on Service Design and Service Innovation, Oslo.
- Dunaway, Michelle 2011. *Connectivism: Learning theory and pedagogical practice for networked information landscapes* Reference Services Review, Vol. 39 Iss 4 pp. 675 - 685.
- Grönroos, Christian 2006. *Adopting a service logic for marketing*, Marketing Theory 6 (3), 317-333.
- Grönroos, Christian 2008. *Service logic revisited: who Creates Value? And who co-creates?* European Business Review 20 4, 298-314.
- Grönroos, Christian & Gummerus, Johanna 2014. *Invited paper, The service revolution and its marketing implications: service logic vs service-dominant logic*, Managing Service Quality, Vol. 24 No.3, 206-229.
- Goodvin, Kim 2009. *Designing for the Digital Age: How to Create Human-Centered Products and Services*, Wiley Publishing, Inc., Indianapolis, Indiana.

Hanington, Bruce & Martin, Bella 2012. *Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions*. Rockport Publishers.

Heinonen, K., Strandvik, T., Mickelsson, K-J. 2010. A customer-dominant logic of service, *Journal of service management*, Vol 21 No. 4 2010, 531-548

Kim, W., C. and Mauborgne, R. 2005. *Blue ocean strategy - How to create uncontested Market Space and Make the Competition irrelevant*, Harvard Business Review Press, Boston, Massachusetts, USA.

Kimbell L. 2010. *Marketing: connecting with people, creating value*. In Stickdorn, M. and Schneider, J. (eds.) *This is Service Design thinking. Basics - tools - cases*. BIS Publishers, Amsterdam, 46-51.

Kumar, Viljay 2013. *101 Design Methods*, John Wiley & Sons, Inc. Hoboken, New Jersey.

Maurya, Ash 2012. *Running Lean: Iterate from Plan A to Plan That Works*. O'Reilly Media, Inc., Sebastopol CA.

Mele, Christina, Colurcio, Maria & Russo-Spena, Tiziana 2014. Research traditions of innovation Goods-dominant logic, the resource-based approach, and service-dominant logic, *Managing Service Quality* Vol. 24 No. 6, pp. 612-642.

Michel S., S. W. Brown & A. S. Gallan 2008, *Service-Logic Innovations - How to Innovate Customers, not Products*. *California Management Review*, Vol. 50, No.2, 49-65.

Moritz, S. 2005. *Service Design, Practical Access to Evolving Field*. Köln International School of Design.

Lusch, R., Vargo, S. & O'Brien, M. 2007. *Competing Through Service: Insights From Service-Dominant Logic*. *Journal of Retailing*, 83, 5-18.

Ordanini, A & Parasuraman, A. 2011. *Service Innovation Viewed Through a Service-Dominant Logic Lens: A Conceptual Framework and Empirical Analysis*. *Journal of Service Research* 14(1) 3-23.

Ordanini, A., Miceli, L., Pizzetti, M., Parasuraman, A. 2011. *Crowd-funding: Transforming Customers into investors through innovative service platforms*, *Journal of Service Management*, Vol. 22 Iss 4 pp. 443 - 470.

Osterwalder, A. & Pigneur, Y. 2009. *Business Model Generation: a handbook for visionaries, gamechangers, and challengers*. Hoboken, NJ: Wiley.

Palveluliiketoiminnan sanasto - *Vocabulary of Service Business* 2009. Tekes (The Finnish Funding Agency for Technology and Innovation) publication.

Polaine, A., Lovlie, L. & Reason, B. 2013. *Service Design: From Insight to Implementation*. New York: Rosenfeld Media.

Portigal, Steve, 2013. *Interviewing Users*. New York, United States: Rosenfeld Media.

Pinheiro, Tanny, 2014. *The Service Startup: Design gets Lean*. Published by Hayakawa, Alta-books and Createspace.

Ries, Eric 2011, *Lean Start-Up: How today's Entrepreneurs Use Continuous Innovation To Create Radically Successful Businesses*, 2011. Crown Business, New York.

Sangiorgi, D. 2012. Value co-creation in design for services. In Miettinen, S. and Valtonen, A. (eds.) *Service Design with theory*, HansaBook, Vantaa, 96-104.

Siemens, George 2005. Connectivism: A Learning Theory for the Digital Age, *International Journal of Instructional Technology and Distance Learning*, Vol 2. No. 1.

Stickdorn M., Schneider J., 2011. *This is Service Design Thinking*. Amsterdam: BIS Publishers.

The Future of Service Business Innovation 2010, Tekes (The Finnish Funding Agency for Technology and Innovation) review 272/2010, Helsinki.

Tschofen, Carmen & Mackness, Jenny 2012. Connectivism and Dimensions of Individual Experience, *International Review of Research in Open and Distance Learning*, Vol 13, No 1.

Tuulaniemi, J. 2011. *Palvelumuotoilu*. Talentum, Helsinki.

Van Dijk, G, Raijmakers, B. & Kelly, L. 2011. This is a Toolbox, Not a Manual. In Stickdorn, M. & Schneider, J. (eds.) 2011. *This is Service Design Thinking: Basics - Tools - Cases*. Amsterdam: BIS Publishers.

Vargo, S. L., & Lusch, R.F. 2004. Evolving to a New Dominant Logic for Marketing, *Journal of Marketing* Vol. 68, 1-17.

Vargo, S., L. 2013. Service-dominant logic reframes (service) innovation. In Isomursu, M, Toivonen, M, Kokkala, M. and Pussinen, P. (eds.) *Highlights in service research*, VTT Technical Research Centre of Finland, Espoo, 7-10.

Voima, Päivi, Heinonen, Kristiina & Strandvik, Tore, 2010. Exploring Customer Value Formation: A Customer Dominant Logic Perspective, Hanken School of Economics. Working Papers.

Wetter-Edman, K. 2009. Exploring Overlaps and Differences in Service Dominant Logic and Design Thinking, *De Thinking Service - Re Thinking Design*, First Nordic Conference on Service Design and Service Innovation, Oslo 24th-26th November 2009.

Wetter-Edman, K. 2011. *Service Design a conceptualization of an emerging practice*, Licentiate Thesis, University of Gothenburg.

Wild, Fridolin, Mödrischer & Sigurdarson, Steinn 2008. *Designing for Change: Mash-Up Personal Learning Environments*, eLearningpapers No 9 July 2008.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2008, *Services Marketing, Integrating Customer Focus across the Firm*. First European edition. The McGraw-Hill companies.

Unpublished sources

Edvardsson B., Kristensson P., Magnusson P. & Sundström E. 2010. Customer Integration within Service Development - A review of methods and an analysis of insitu and exsitu contributions. The 11th International Research Seminar in Service Management, La Londe les Maures - France, May 25-28 2010.

Mueller, Roland & Thoring, Katja 2012. Design thinking vs. Lean startup: a comparison of two user-driven innovation strategies, *Leading Innovation Through Design*, 2012 International Design Management Research Conference, August 8-9 2012, Boston, Ma USA.

Lusch, R. & Nambisan, Satish 2012. Service Innovation: A Service-Dominant (S-D) Logic Perspective.

Ojasalo, Jukka & Ojasalo, Katri 2015 (forthcoming). Adapting Business Model Thinking to Service Logic: An Empirical Study on Developing a Service Design Tool. In Viitanen, J. and von Koskull, C. (Eds.), The Nordic School - Alternative Perspectives on Marketing and Service Management, Hanken, School of Economics, Helsinki, Finland.

Electronic sources

Dawson, Ross. 2014: Crunch Time! <http://rossdawson.com/frameworks/2014-crunch-time/>. Accessed 27.5.2014.

70-20-10 Forum <https://www.702010forum.com/about-702010-framework?mm> Accessed 10.1.2015.

Furr, Nathan & Dyer, Jeff 2014, Choose the Right Innovation Method at the Right Time, Harvard Business Review. <https://hbr.org/2014/12/choose-the-right-innovation-method-at-the-right-time> Accessed 4.1.2015.

Sitra trend list - 13 megatrends <http://www.slideshare.net/SitraFund/sitra-trends-list-2014-2015-final-english> Accessed 15.3.2015.

Eleven lessons: managing design in eleven global brands A study of the design process, Design Council
http://www.designcouncil.org.uk/sites/default/files/asset/document/ElevenLessons_Design_Council%20%282%29.pdf Accessed 21.2.2015

Maurya, Ash, How to Create your Lean Canvas <https://leanstack.com/LeanCanvas.pdf> Accessed 22.3.2015

Website of the case company Markkinointi-instituutti <http://www.markinst.fi> Accessed 21.3.2015

Interviews

Sarvas, Risto 2015. Interview 27.1.2015.

Figures

Figure 1: Framework for building a Personal learning environment for a knowledge worker	9
Figure 2: Structure of the thesis and relations between theory, methods and outcome ...	11
Figure 3: Thirteen megatrends (Sitra 2014).....	14
Figure 4: Future work skills 2020	15
Figure 5: Value generation process: value creation and co-creation according to the service logic (Grönroos & Gummerus 2014, 218).	22
Figure 6: The provider-dominant versus customer-dominant logic of service (Heinonen et al.	23
Figure 7: Customer roles in service innovation	26
Figure 8: Criteria for successful innovation, (Brown 2009).....	28
Figure 9: Customer development process, Cooper & Valikovits (2010, 9).	32
Figure 10: Build-Measure-Learn -feedback loop (Ries 2011, 81; Maurya 2012,12).	34
Figure 11: Innovation process and which tools work best in which phase (Furr & Dyer 2014, Harward Business Review).....	37
Figure 12: The phases of the design process and how work was divided	42
Figure 13: The Double Diamond model of design process	43
Figure 14: First draft of the mock up service ad	45
Figure 15: Service blueprint for overnight hotel stay (Bitner et. al 2008, 76)	46
Figure 16: Service blueprint illustrating the signing up process for the customer	47
Figure 17: A picture taken from the workplace on one interviewee	49
Figure 18: The Lean canvas and in which order to fill the sections (Maurya 2011).	52
Figure 19: First draft of the Lean Canvas for the service concept	53
Figure 20: Blue ocean strategy profile for the service idea	54
Figure 21: Clustering the insights	55
Figure 22: Other one of the two personas based on research insights.	57
Figure 23: Three elements for the service pilot.....	58
Figure 24: Structure of the service pilot.....	59

Tables

Table 1: Principles of connectivism (Siemens 2004)	14
Table 2: Ten foundational premises of service-dominant logic (Vargo et al. 2008, 148). ..	20
Table 3: Comparing service design and Lean startup (Pinheiro 2014).....	38
Table 4: Comparing design thinking and Lean Startup as innovation methodologies (Mueller & Thoring 2012, 6).....	41
Table 5: Service concept described with Service concept worksheet template.....	62

Appendixes

Appendix 1: One of the two personas created based on customer insight.	57
Appendix 2: Customer experience map based on learnings of the service pilot	61

Appendix 1: “Johanna”, One of the two personas created based on customer insights

Haluan elää ja vaikuttaa – läsnä ja digisti

Harrastukset, elämäntilanne

Eronnut, kaksi aikuista lasta edellisestä liitosta. Uusi mies löytyi kirjakaupan sinkkutreffeilta. Asuvat omissa talouksissa ja ajatus uusioperheestä miehen kahden lähes aikuisen tyttären kanssa hirvittää Johannaa. Vapaa-aikaa vietetään yhdessä umpirakastuneina taiteesta ja kulttuurista nauttien. Johanna hakeutui eron jälkeen usein hiljaisuuden reititietoihin ja haaveilee nytkin unelmavaelluksesta rakastettunsa kanssa Santiago de Compostelaan. Lukee ahkerasti matkablogeja. Matkustaminen ja uudet kulttuurit ovat intohimo, mutta myös jatkuva itsensä kehittäminen ja oman ammattitaidon jakaminen nuoremmille. On aktiivi oman toimialansa mentorpankissa. Erikseen kannettava kotona ja töissä, mutta iPadilla työ ja oma asia sekoittuvat.



**Johanna 49 v.,
henkilöstöjohtaja**





Huolenaiheet, turhautumiset

Johanna on ammattiliiton henkilöstöjohtaja, jonka vastuulla on monen ihmisen tulevaisuus. Haluaa tehdä merkityksellistä työtä, mutta kokee riittämättömyyden tunnetta digimaailman ja tietotulvan vyöryessä omaan maailmaan. On luonut tilin sinne ja tänne, mutta ei oikein tiedä, millä foorumilla hoitaisi työroolia, millä omaa persoonaa. Yksityiselämän rakkaudessa roihuaa, mutta työmarkkinakelpoisuuden ja oman ammattinäkyvyyden takaava digitaalinen jalanjälki on heikko. On huolissaan myös työpaikkansa brändistä ja haluaisi varmistaa, että liitto olisi houkutteleva työpaikka myös diginatiivien silmissä. Pitää itseään vahvana oman alansa ammattilaisena ja haluaisi jakaa oman kokemuksensa muille. Toisen kirjankin voisi kirjoittaa, tutkimuksenkin tehdä, mutta ammattimainen ote ja henkilökohtainen ja näkyvyys verkossa epäilyttää. Mutta kuka auttaa esimiestä, sillä esimiehenä pitäisi hallita ja osata jo kaikki?

Tavoitteet, pyrkimykset, motivaatio

Johanna on elinikäinen oppija, mutta nyt fokuksessa on itselle kertyneen ammattitaidon jakaminen. Paras tapa oppia on opettaa muita ja Johanna onkin aktiivinen kouluttaja ja kysytty esiintyjä erilaisilla areenoilla. Johanna kirjoitti kirjan valmentamisesta, toimii mielellään mentorina HR –urasta haaveileville ja haluaa kantaa vastuun jäsenistönsä osaamisen kehittämisestä. Mutta nyt pitäisi ottaa uudet keinot käyttöön, päivittää verkostot digiaikaan ja hakea uusinta oppia some välineiden hallintaan. Verkkopresenssi ja digipäivityksen rutiinit pitäisi saada niin joustavaksi omaan arkeen ja työhön, että läsnäolo lähimmäisistä ei kärsi.

Appendix 2: Customer experience map based on learnings of the service pilot

Experience	Pre service	Kick off session	First coaching session (face to face)	Face to face sessions (social media training)	Second coaching session (via Lync /Skype)	Ending session & wrap up
Ideal experience 	Customer service chat helping with possible questions. Pre material and pre assignments for orientating.	Inspiring and energizing atmosphere. Clear understanding what happens next and during the program. Starting already with the tools and getting guidance with them. Creating an understanding that there are no right answers.	Preparing for the session with a "training diary". Making the learning process visible and actionable by setting goals and actions and keeping track throughout the service.	Having pre material well in advance. Group divided according to skill level so everyone gets guidance according to their needs. Clear instructions and having everyone committed to prepare for the sessions.	Suitable times for coaching available, invitation and instructions how to prepare early enough. Having the "training diary" element integrated throughout all the coaching sessions.	Next steps are clear and there is a plan how the new ways of working are integrated in the daily routines and work. Person feels uplifted and equipped with new skills and thinking.
Positive experience 		Inspiring atmosphere and interesting content.	Being able to stop and think about your own professional strengths. This is just for me!	Getting new tools and practical tips how to make use of social media as tool for learning and networking. Inspiring and useful training.	Human connection via Lync/Skype works too. Easy and accessible – don't have to travel. Practical tips and personal coaching really works.	Photo session Getting still some more interesting information. Clear plan and steps how to proceed feels ensuring.
Negative experience 		Needing more help and guidance with getting started in identifying own professional strengths	Having a great session but then forgetting the ideas and not realizing them.	Too heterogenic group. People with more experience and people with no experience. Everyone should have the social media accounts ready. Time to practice with different devices: laptop vs. tablet. Even more personal feedback	Links and instructions came sometimes too late, no time to prepare. Sometimes goals and plans were left too fuzzy and were not kept track.	Material from the session was forgotten to give to the participants. Some are feeling challenged when the training ends and pondering how to really make use of the learnings and change ones behavior.
Customer quotes 	<p>"Sosiaalisen median tiilit olisi hyvä olla perustettuna jo valmiiksi"</p> <p>"Joku ennakkohtävä ja orientoituminen etukäteen. Taso ja osaaminen selviää jo etukäteen"</p>	<p>"Vahvuuksien tunnistamisen työkalu jäi alussa liikaa sivurooliin. Jäi paljon itseopiskelua"</p> <p>"Aika loppui kesken"</p> <p>"Enemmän vielä osallistujien välistä keskustelua"</p>	<p>"Hyvä, että tämä oli kasvokkain"</p> <p>"Erittäin opettava kokemus. Oppi paljon itsestä. Ohjauksen jälkeen jäi hyvä mieli!"</p> <p>"Toimi!"</p>	<p>"Enemmän aikaa klinikkaan."</p> <p>"Alustukset hyödyllisiä ja inspiroivia"</p>	<p>"Lync on nro 1"</p> <p>"Ohjaus on ollut rakenteeltaan hyvä."</p> <p>Ideoita ja tehtäviä tullut paljon."</p>	<p>"Olisin kaivannut vielä enemmän vierailtoja ja enemmän hands on ohjausta tietokoneen äärellä."</p> <p>"Kaiken kaikkiaan erinomainen kokonaisuus, josta sai paljon konkreettista hyötyä."</p>